

Basic Skills at School and Work

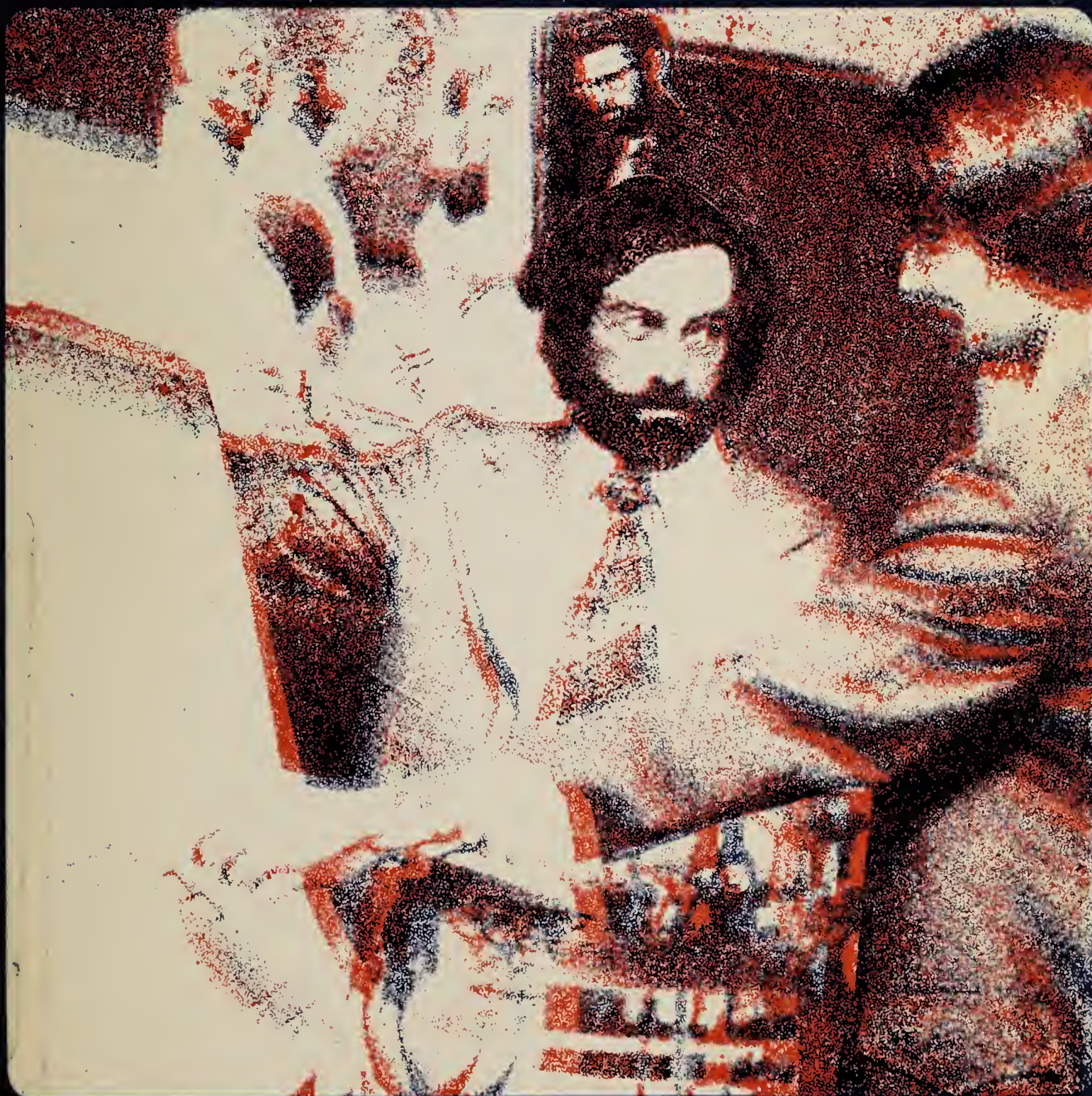
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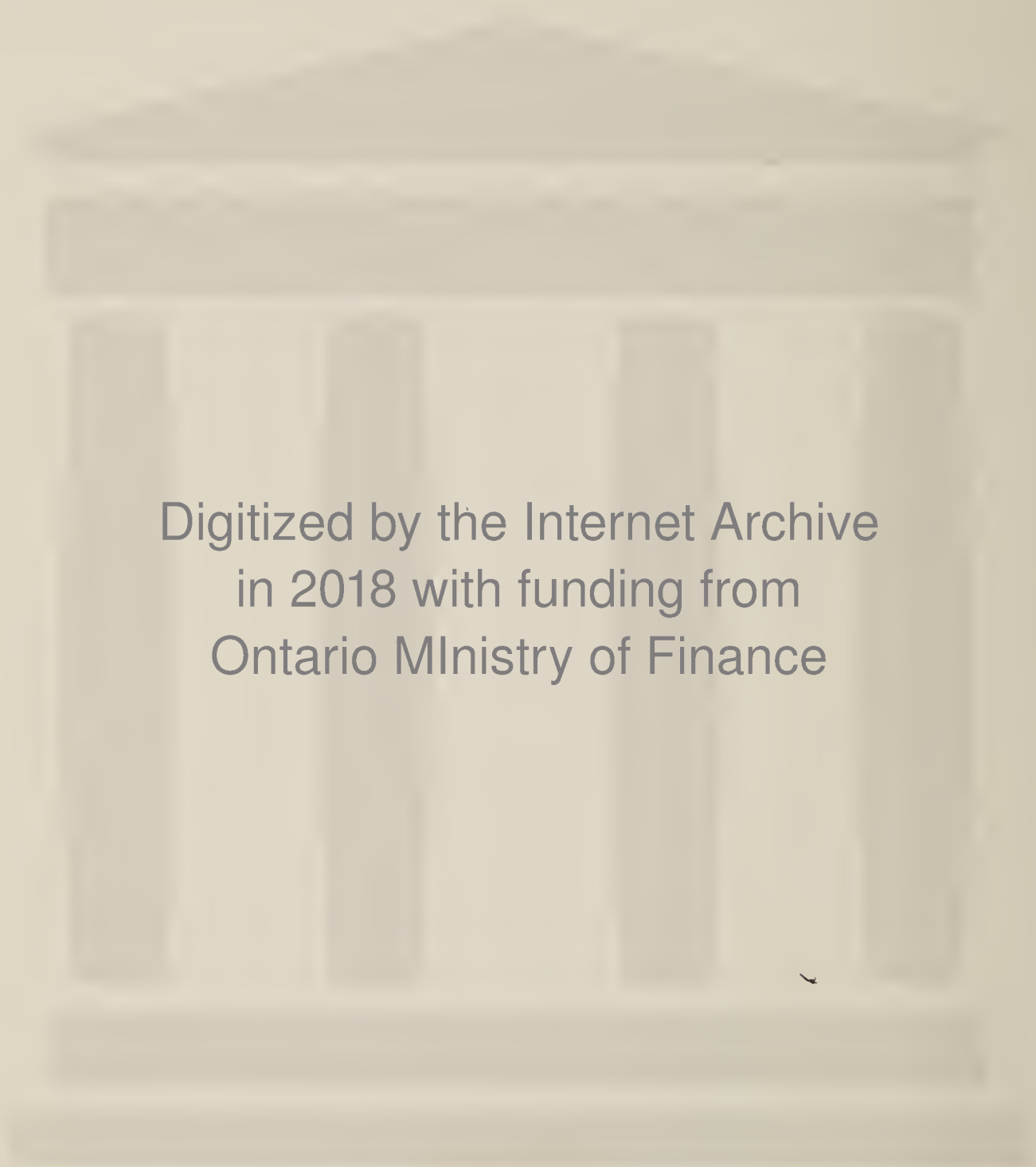


The Study of Albertain

Oswald Hall and Richard Carlton

Occasional Paper 1





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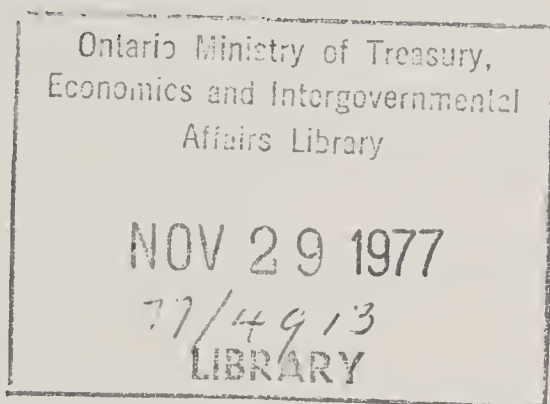
Basic Skills at School and Work

Ontario
Economic
Council

The Study of Albertain an Ontario Community

Oswald Hall and Richard Carlton
with the assistance of David Donnelly
and Steve Elson

Occasional Paper 1



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Preface

The current perception of a crisis in the teaching and learning of "basic skills" reflects a wider set of problems in Canadian schools. In part, this concern is linked to recurrent questions about the success of the schools as instruments of egalitarian social policy, and their role in providing skills which can become the basis for later work careers. In part, however, concern with basic skills evokes a quite different set of structural questions having to do with the active interrelationships of our institutions of school and work, and their mutual involvement in larger processes of social change.

The mandate from the Ontario Economic Council to investigate preparedness in basic skills became, for us, a welcome occasion to explore these larger questions. The focus on basic skills provided a natural and exciting point of entry into those processes of growth and innovation which have transformed the settings of education and work. Any narrower focus upon particular curricular outcomes or occupational requirements seemed inappropriate as we entered a concrete and lively community, within which we probed history, social process and organizational structure in an effort to observe these basic skills at school and work.

What has emerged is, in large part, a study of dramatic changes in the world of education and the structure of employment opportunities, not at the ideal level of paper curricula or codified job descriptions but at the level of the immediate experience of participants in the daily routine of the classroom, office or factory. Our findings thus aim at complementing rather than replicating the growing bodies of survey research data relating to school retention and employment patterns, measured levels of skill proficiencies, or the attitudes of students, teachers and employers. Moreover, this community study may afford a supportive context within which much of the current survey research can be interrelated and enriched in meaning.

We hope that this study of "Albertown" contributes not only to an understanding of those problems associated with the acquisition and application of

basic skills, but, in a modest way, to an appreciation of the dynamics of change in the institutions of school and work. We anticipate, therefore, that this report may engage the student of society no less than the educator or policy researcher, and that our observations may have lasting value as well as current relevance.

We are much indebted to both the Ontario Economic Council and the University of Guelph for their support of this research. At the same time, our gratitude to the people and organizations of "Albertain" must be recorded; courtesy, cooperation and interest were found in every quarter. The research could not have been carried out without the skilled assistance of our field researchers, David Donnelly and Steve Elson, who entered enthusiastically into every phase of the work. We appreciate, equally, the efforts of Suzanne Toldnes, who carried out our secretarial and typing tasks so competently.

The text was set by computer at the Institute of Computer Science, University of Guelph, where the staff of Academic Computer Services offered much patient support and technical help. We are particularly grateful to Barry Stahlbaum for his interest and advice. Thanks are due, as well, to our copy editors, Dale DuQuesnay and Karole Costello, and to Bill Dechaine for his most valued technical assistance.

Finally, we are indebted to all those others who helped us in less visible but important ways throughout our enquiry.

Guelph,
July, 1977.

O.H.
R.A.C.

Chapter I

Introduction

A MANDATE FOR INQUIRY

In 1975 the Ontario Economic Council launched a set of studies to explore the relations of education to the economy. One of the underlying concerns, that current training in "basic skills" might be inadequate to the needs of an industrialized society, provided the focus for the research reported here. This uneasiness regarding levels of achievement in basics was clearly shared by other segments of our society. The Chamber of Commerce (1975,1976) had expressed concern over the deficiencies in skills of English and arithmetic reported among recent entrants to the work world. Associations of university teachers, as well as particular post-secondary institutions, had generated position papers and surveys reflecting their dissatisfactions(1). An opinion poll carried out by the Ontario Secondary School Teachers' Federation (1976) highlighted serious problems in instruction from the concrete perspective of the classroom teachers. Such statements were the forerunners of an increasing stream of comment and criticism that continues to appear in newspapers and other media.

Our inquiry was designed to assess basic skills by probing two related problem areas. First, how well prepared, in the skills of mathematics and English, are the young people who enter the work world directly from

(1) See, for example, Norman (1976), Council of Ontario Universities (1976) and University of Guelph (1976).

the secondary school system? Secondly, since many young people now make a detour through post-secondary institutions, how well prepared are they, in such skills, to handle the requirements of post-secondary education?

WHAT ARE "BASIC" SKILLS?

The question is disarmingly simple, but the answer is otherwise. Indeed, it is the very lack of consensus as to what constitutes basic skills in education that constitutes much of the problem. Thus, a word of caution may be appropriate for the reader who thinks of skills in communication or mathematics as simple entities that have an existence all their own. Skill in writing is, by way of contrast, merely one facet of a bulky bundle of elements in which it is embedded. For students, this skill is bound up tightly with other matters such as the following: does he use time and energy for practising; does he discover his errors and remedy them; does he strive to perfect an assignment before he submits it; does he strive for high standards when these may be ignored by those around him (parents, journalists, advertisers, teachers, politicians); does he accept the authority of the teacher to insist that he strive for higher standards? As we have observed teachers and students, and consulted with them, we have come to realize that those who learn such skills and those who teach them are doing this within a network of conditions that tightly constrains what each can achieve. Thus, to tell teachers to teach English more and better, and to tell students to study it more, is in effect equivalent to scolding and using word-magic. The effort to move writing skill to a higher level involves pushing up the whole web of conditions under which it is taught and learned.

Within this framework of work habits, attitudes, values and social relationships, it was necessary to establish an initial definition of "basic" skills. Needless to say, many current educators dispute the idea that conventional levels of literacy or

computational skill are "basic" in today's world of changing personal and career demands. Consequently, while some "working definition" was required in order to focus and direct the inquiry, it became necessary to anticipate the shifting relevance of various skills to students following divergent career lines. We proceeded by trying to estimate both current levels of achievement and the appropriateness of these levels for subsequent demands of the work world or post-secondary settings. In sum, we did not define "basic" levels arbitrarily in advance; rather, we concentrated upon the "fit" between skill proficiencies and the situational demands of both employment and academic settings.

Yet a focus on "basic skills in mathematics and English" still poses the problem in extremely general terms. So stated, the problem is abstracted from the real world of education and employment in which it is inextricably interwoven. As one tries to deal with the issue empirically, one is constrained to focus concretely upon the student who possesses the skills, the teacher who imparts or monitors them, the employer who utilizes them, and so on. A first step in grasping the substance of "basics" involves us, therefore, in sorting out the full range of actors who play a part in the drama of learning and using such skills. Inevitably, each of these actors will have a distinctive point of view on the matter of preparedness. The reader of this report will thus meet a wide variety of perspectives employed by those who provide information about the basic skills.

Through whose eyes should preparedness be viewed and assessed? There are at least ten groups who have some claim to involvement in this process of assessment:

- Elementary School Teachers
- Elementary School Students
- Secondary School Teachers
- Secondary School Students
- Community College Teachers
- Community College Students
- University Teachers

University Students
Employers
New Employees (entering work from
secondary school).

In due course we must provide, for the reader, an interpretation and synthesis of these diverse outlooks. Our intervening task is to pit the views of each against others, to explore conflicts and congruities, to make a trial of each with the external evidence of community records and daily observation. In this, we must have regard for the kinds of social organization which bind the groups together. Some are unified in organic fashion to such a degree that they form a "system". The secondary school, for example, provides the setting for such a social system. Teachers, students and in-school administrators interact in a localized world of their own, within which they are the principal actors. Peripheral to this system are the relations with parents, the Board and the Ministry. Such systems are as relevant to inquiry as are the categories of individual actors listed above. We shall refer to systemic aggregates of this sort as "sectors" and our analysis will concentrate on four such sectors:

The Elementary Sector
The Secondary Sector
The Post-Secondary Sector
The Employment Sector

The investigation thus moves forward on three levels. It begins at the individual level with statements about particular actors in the drama of education and work. It continues at the level of organizational analysis by considering the structure and dependencies of each institutional sector. Inquiry then moves to a level where the common features of these sectors can be interpreted within a framework of consequential social trends.

With these various levels in mind, the basic organization of the report can be portrayed readily. Chapter Two provides a set of "vignettes" sketching each of the categories of actors listed above. The question of skills is viewed through their eyes.

In Chapters Three, Four, Five, and Six there follow a description and an analysis of those concerns for basic skills incorporated by each of the four organizational sectors. The summaries concluding each chapter afford some cumulative review and synthesis.

Chapter Seven offers some generalizations about the place of skills in the larger community, set against a background of encompassing social change. Finally, some critical policy areas are identified.

THE COMMUNITY STUDY APPROACH

By contrast with the flow of survey research and opinion polls, we sought to explore preparedness in basic skills through the study of a single community. Within the social sciences, there exists a long and lively tradition of such inquiry, exploiting the "community" as a framework which brings immediate observation and critical analysis into the most intimate kind of interplay. Our decision to employ this strategy of a "community study" was carefully considered, having regard for the research objectives, the level of analysis sought, the state of our prior knowledge, and the available tactical alternatives.

Our problem focus required essentially that we explore the relations and "fit" amongst the major social institutions of education and work, in a context of rapid social change. We could not, therefore, restrict the study to tapping a single category of actors (in terms of beliefs or behaviours), a single level of analysis (whether of organizations or roles), or a single point in time withdrawn from the movement of history within which it would take on meaning. For us, these were some of the liabilities which survey research would have entailed. By contrast, our need to see the interrelatedness of changes within the worlds of work and education was matched by precisely this traditional strength in the community study approach:

Though more recent studies of the community have tended to focus their attention on selected problems rather than attempts to describe the whole community,

they have always shown, no matter how imperfectly, the interrelationship between the various segments of community life. As a result, the "totality" has neither been neglected nor shattered into unrelated segments As a consequence of the unwillingness of most community researchers to forsake direct observation and direct reporting of the community life, we still have coherent images of the community and social life which are unattainable by other methodologies (Vidich, Bensman and Stein, 1964, xi).

Clearly, we needed information, of different sorts, from persons in specific locations throughout the educational and employment sectors. At another level, we needed to inquire into the organizational structures of the school, the factory, the office and the university. Moreover, it would be essential to bring both sorts of information together within another perspective, that of the student threading his way through the educational system into employment. Finally, we would surely be required to set observations of the present situation within the larger context of societal change and institutional adaptation: the community may be studied in isolation, but it is never effectively isolated from its historical and geographical setting.

As methodologists have noted, this thrust toward an integrated, coherent view of complex social processes has been the dominant rationale for community research:

The central problem of the community sociologist is to achieve an objective perspective that encompasses the partial perspectives held by various groups in the community in such a fashion as to call attention to hidden processes without losing sight of the meanings of the various partial perspectives to encompass multiple interpretations of a social world within a larger context which distinguishes objective structures without obliterating subjective meanings (Stein, 1960, 325).

Beyond these advantages, we knew that the opportunity for prolonged and intensive field work would permit us to penetrate beyond conventional rhetoric and the verbalized or "ideal" descriptions of social life, to confront the actual behaviours making up the day to day experience of the student or new employee. As well, the development of an eclectic field methodology encompassing extensive interviewing, survey tactics, direct observation, the use of documents and records, and the collection of career case studies would offer important and unusual checks on the validity of the data obtained.

In sum, we sought to investigate the learning and application of basic skills in a way that would expose new aspects of the problem while providing a framework which might enhance the meaning and interrelationship of some existing studies. We attempted to obtain this sort of unifying overview by creating a portrait of an Ontario community - Albertown - in which the transition from secondary school has been recorded in detail and in context.

The great liability of any community study is, of course, the question of its generalizability. How do we know that observations in Albertown have any relevance outside that community? Put in methodological terms, the problem for the field researcher is to discriminate between local or particularistic aspects of his situation and shared or recurrent elements of structure and process. No community is typical; each has a distinctive social fabric blending unique strands of history, environmental change, institutional development and population movement. Nevertheless, each community shares in some larger symmetry of values, organizations, and careers. Common elements of culture and socio-economic structure can be found, in short, in any community. Thus, abstraction or generalization from community research poses the same order of problem encountered in other styles of inquiry, although the field worker may here be required to exercise a higher order of personal judgment, according to canons which are neither routinized nor well codified by the "grammar" of science.

In general, cautious community researchers restrict themselves to the sorts of generalizations which are massively apparent within the community and which illuminate structuring or process unquestionably present in other situations. In terms of our interest in basic skills, we were prepared to assume that changes in the structure and ideology of education, in the mass media, in the size and retention of the school population, in the technology of the clerical or industrial setting, or in the general structure of employment opportunities and post-secondary access were, in fact, much broader than the community in which we proposed to study them. Such processes and the nature of their interactions are generalizable, although the particular ways in which they work out will vary concretely within each and every community.

To assess the worth of a community study one should ask, "Has it disclosed facets of the problem which may, so far, have eluded discussion? Does the analysis deal with elements or relationships readily discernible within the broader range of situations with which we are ultimately concerned?" If these questions can be answered positively, then the findings of a carefully executed community study are certainly firm enough to support policy debates on the issues raised.

SOURCES OF DATA

The data for the study were secured by a variety of probes of the community. In all, we used eight approaches to generate the sorts of facts deemed useful. Each yielded a distinctive order of information.

The first probe was a general search of the literature about the community, and the amassing of all the available census data (Statistics Canada, 1971b) plus statistics generated by other surveys. To these were added the administrative reports of educational institutions, and other official documents as available. These data were used as an aid to orientation of the project. They do not enter specifically into the analysis.

The second probe was a systematic and inclusive set of interviews with teachers and administrators of the elementary school system. These interviews focussed primarily on the teaching of mathematics and communication skills in those schools. The interviews were supplemented by on-the-spot observation of classroom procedures, as well as by selective interviews with students.

The third probe involved a similar set of interviews in the secondary school system. These covered a similar terrain, but included comment by secondary teachers on the products of the elementary school, as well as the relations of secondary schools with the post-secondary system and world of employment.

The fourth probe was directed at the employers of the community. The main representatives of the world of employment (manufacturing, commerce, service) were interviewed at length to discuss hiring practices. We probed particularly their experiences with employees who had entered work directly from school in the current year. Where possible, the supervisors of workers as well as personnel officials were contacted.

The fifth probe was a questionnaire (see Appendix A) which was mailed to all students who moved out of the secondary school system during the school year 1974-75. This questionnaire went to students who completed a five year programme of studies, those in the four year category, and those who dropped out without completing either of these. The school administrators facilitated this effort, which attempted to reach some 1400 students. Approximately fifty per cent of the questionnaires were returned, enabling us to select a sample of students for personal interviews.

The questionnaires also provided useful information on the larger student body. Such quantitative data were later analyzed independently as a check upon the validity and representativeness of our interview materials.

The sixth probe was a set of intensive structured interviews with the sample of students selected from those who had responded to our questionnaire. These interviews attempted to reconstruct for each student his academic career, specifically in English and

mathematics, and to explore carefully the fit between his qualifications in these areas and the current requirements of his courses of study or employment.

The seventh probe was a set of interviews with administrators and teachers in the community college. The objective here was to explore the fit between the qualifications of the students in the basic skills and the requirements of specific programmes of study offered by the College. The focus was on the students drawn from the local community. These interviews were analysed in conjunction with interviews of students who had attended the College and who had been contacted through the preceding probes.

The final probe concerned the university in the community. The intent here was to interview faculty members with regard to their assessment of the qualifications of first year students coming to their classes. As might be expected, few university teachers are able to identify the products of any specific school system. Most of the information stemmed from faculty engaged in teaching first year courses in English and mathematics. As in the case of the college, the interviews were analysed in conjunction with the information gained from student interviews in our sixth probe.

As will be evident, the eight probes explore the community at different levels and with varying degrees of inclusiveness. The first probe was all-inclusive. The second and third probes were highly inclusive; access was achieved in all schools. The probe of the employers was less inclusive; a large number of work organizations, all small, were beyond our resources to contact. The fifth probe, directed to the secondary school students, embraced only those who voluntarily completed our questionnaire. The sixth managed to reach the students who volunteered to be interviewed in the wake of the questionnaire. In probing the community college, we were exploring an institution that served a variety of communities and drew its students from a wider area. At the level of the university, we were dealing with an institution which, though located in the community, is at least a provincial, if not a national and international

institution. Some of our data sources are highly inclusive; others are less inclusive; still others spread well beyond the community framework.

ALBERTOWN

This is a study of "Albertown", an anonymous community in southern Ontario. In abstaining from revealing its identity, we follow a well established tradition in sociology. Although some of our informants provided data in anonymous fashion, the bulk of the information came from face-to-face interviews or direct observation. Our informants assumed, correctly, that we would handle with utmost discretion all of the revelations they provided. The simplest way of honouring their trust is to avoid all public identification.

This anonymity permits us to offer the reader the unedited views and comments of the individuals who were interviewed. We have tried to present the facts exactly as they came to us. In presenting them, we are neither trying to expose the weaknesses or shortcomings of individual persons, nor to afford praise to those who may be entitled to some. We trust that all who find their own comments here can read the document without dismay.

Albertown is a medium-sized urban community in the 50,000 to 75,000 population range. Encircled now by the beginnings of a suburban sprawl, with the familiar condominiums, plazas and freeways, the older city core nevertheless continues to reflect its history of slow and stately growth. Century homes and post-war bungalows mix pleasingly with occasional factories and commercial enterprises in the heterogeneity which oft conceals both current uses and variable neighbourhood prestige. Perhaps symbolically, the mature and ample parks which thread their way through Albertown, along various riverbanks, reflect something of the community's close ties with its rural hinterland. For most of its history, this centre has depended as much upon regional governmental, educational and commercial services as upon industrial development. Ties with the

agricultural community remain strong, and rural youngsters are still served by the town's secondary schools and recreational facilities. While the population of rural background thus figures importantly in Albertown, there are, however, influential newer elements in community life. The growth of a large ethnic minority and its separate institutions, the arrival of increasing numbers of urban migrants, many of whom continue to commute to more populous nearby cities, and the rapid expansion of Albertown's university have all contributed to a more cosmopolitan quality of life. Albertown has effectively recruited the loyalties of many of these newcomers, who share pride in past history and participate actively in shaping the community's future.

While no community can be considered a typical Ontario urban community, Albertown does have a set of characteristics that are shared by many others. It has both a substantial industrial base and a comparable commercial base. The service industries (personal and business) are well represented. The health and service industries play an important role in employment. Of the population fifteen and over almost eighty per cent of males are employed and approximately forty-seven per cent of females. Albertown has the full complement of educational institutions; a university, a College of Applied Arts and Technology, and both public and separate school systems.

Albertown does not exhibit any idiosyncratic features that would indicate special strains or stresses in the school system. The problems and difficulties that arise in education spring from the general social conditions of the larger society rather than from any highly distinctive local conditions.

As far as opportunities for employment for secondary school students are concerned, our community again cannot be considered to be special in any way. There are job opportunities in a wide variety of manufacturing concerns, in large offices, in retail.

Table I

SELECTED DEMOGRAPHIC CHARACTERISTICS OF ALBERTOWN
 COMPARED WITH ONTARIO AND CANADA* (Source: Census of
 Canada, 1921-71)

Demographic Variable	Albertown	Ontario	Canada
Growth Rates			
1921-31	1.6	1.6	1.8
1931-41	1.0	1.0	1.1
1941-51	1.8	2.1	2.2
1951-61	4.6	3.6	3.0
1961-71	5.1	2.4	1.8
Total-Population			
Males	49.55	49.72	50.09
Females	50.45	50.28	49.91
Population			
Marital Status			
Single	46.9	47.1	49.5
Married	47.5	47.3	45.3
Divorced	.8	.9	.8
Widowed	4.8	4.7	4.4
Children By Age			
Under 6	26.3	24.9	24.4
6-14	46.5	46.6	46.4
15-18	16.6	17.6	18.0
19-24	10.6	10.9	11.2

* All frequencies are reported as relative frequencies (per cent) in order to preserve the anonymity of the community studied.

Table I (Continued)

Demographic	Albertown	Ontario	Canada
Birthplace and Immigration			
Born in Canada	79.14	77.83	84.72
Outside Canada	20.86	22.17	15.28
School Attendance (5 yrs.+)			
Full time attend	31.66	29.89	30.06
Not attending	68.34	70.11	69.94
Religion			
R. Catholic	34.77	33.35	46.25
United Church	20.23	21.85	17.47
Anglican	15.76	15.84	11.79
Presbyterian	13.58	7.01	4.04
Other Christian	9.74	15.78	14.77
Jewish	.61	1.63	1.28
No Religion	5.31	4.46	4.31
Other	.00	.08	.09
English Spoken in Home	91.39	85.14	66.98
Average Total Income per Household Head	7,637	7,805	7,041
Average Household Size	3.3	3.4	3.5
Labour Force Participation			
Males	78.9	80.2	76.3
Females	46.3	44.2	39.9

trade and in educational and health institutions. In other words, the general sorts of unskilled, semi-skilled, clerical and service jobs that require minimal vocational training are all available, and for those occupations that require more extensive education Albertown University and College provide such opportunities.

Although Albertown has maintained much of its traditional integral character, it has nevertheless had to contend with strong external forces for change. Some of these pressures have been felt particularly in the areas of education and employment.

In the early fifties the birth rate soared, leaving a wave of problems in expansion to break successively upon educational institutions at all levels. Increases in immigration further swelled the school population. Growth brought new problems, but it also offered unprecedented opportunities for change.

The post-war period also witnessed the post-industrial shifts in the work world. Whereas Ontario had geared its educational system to meet the needs of expanding secondary industry, what emerged was a society in which the provision of services became the dominant form of employment expansion. Growth in the tertiary sector (Langelles, 1966) took planners by surprise, and educational institutions adjusted but slowly and clumsily to such shifts in social organization, which are only now being fully recognized.

The same years were further marked by continuous, lively innovation on the part of Ontario's Ministry of Education. It reshaped the administrative units, generated new sorts of physical plants, created new post-secondary structures, reconstructed curricula and reorganized personnel. School programmes were changed, examination procedures modified and teacher education upgraded.

Perhaps even more remarkable, however, is a shift which has gone largely unnoticed. This is the extraordinary response and adaptation of the educational institutions and their personnel to the demands for change. Administrators have welcomed growth. The teachers have responded by enthusiastic

specialization. Administrators and teachers have embraced the opportunities for their mutual expansion. With very little effort, they have emerged as the largest single industry in the province. In time, the twin objectives of bigger bureaucracies and heightened professionalism may impoverish education for the student. Meanwhile, this little noticed process may provide a useful vantage point for observing and understanding what is happening to education in Ontario. The process has been quite visible in Albertown, as it must be elsewhere.

Albertown, in sum, seemed to be an eminently satisfactory setting for the sociologist to explore the fit between basic skill qualifications and the requirements of employment or post-secondary education. The elementary and secondary schools of the community were deeply involved in their age-old task of developing literacy and numerical skills among the youngsters of the community. Each cohort of youngsters was characteristically attempting the jump from the world of secondary school to the next stage in their careers. Our task was to move into these areas of community life, and to extract data that would throw light on the problems the Ontario Economic Council had propounded.

Chapter II

Dramatis Personae

This chapter approaches the problems of the basic skills at the most concrete and personal level, by inviting the reader to view them through the eyes of various concerned participants. In such an overview, the reader may savour the diversity with which a common problem appears, when approached from different perspectives.

The views of these selected participants may strike the reader as somewhat strange, and even mutually conflicting. This is to be expected, inasmuch as each actor has been abstracted from his normal social setting. Each participant is presented here in stark simplicity. Moreover, most readers are somewhat distant from personal acquaintance with these groups, and time, too, may have dimmed their perceptions. Furthermore, schools and students have undoubtedly changed, and it is the more recent reality which is presented here.

Community researchers have recognized not only the difficulties of attaining objective situational analyses, but, as well, the relative inadequacy of such descriptions for our understanding of social structure and process. While the perspectives of participants are admittedly "private" and "biased", they are nevertheless the definitions of the situation, (Thomas and Znaniecki, 1958) the motivations which prompt behaviour and, at the same time, render it intelligible and affectively familiar to us. They constitute an indispensable kind of data for the community sociologist.

In attempting to understand the educational issues in Albertown, then, it became necessary to tap two levels of explanation. Beyond a small core of "hard"

data such as written curricula, policy directives, enrolment or test results, most of the facts surrounding these issues seemed to be contingent upon the viewpoint of particular actors or categories of actors within the community(1). We thus made it our business to tap and to map the individual and collective meanings which the problems held for the teachers, the pupils, the school administrators, trustees, young workers, employers, professors, undergraduates, and parents. These are the dramatis personae, the role-players in our social drama, through whose eyes we learned to see the community. However much their views may diverge from one another, or from some objective realities, their perceptions are the wellsprings of their actions, and must serve as one important basis for our analysis. As W.I. Thomas (1928) noted, "If men define situations as real, they are real in their consequences."

The group sketches which follow here form no part of our analysis as such; rather, they are intended as sympathetic vignettes conveying the understandings and values which typically motivate members of ten selected groups.

ELEMENTARY TEACHERS

Of all groups in our community, the elementary teachers are perhaps most disturbed and bewildered by the public outcry for a return to basics. Moreover, they feel themselves at the terminus of the whole "buck-passing" process, in which the criticism of post-secondary educators and employers is deflected by the secondary schools to the senior public or junior high schools. Here, in turn, the finger of blame is pointed toward the junior elementary school, the "grass

(1) This point is well developed in a wide range of methodological and theoretical works. For pivotal early statements see particularly Cooley(1926) and Weber(1962).

roots" of the system. Such criticism is doubly frustrating in so far as these teachers consider that they had themselves already diagnosed the shortcomings in question and were initiating effective action within the schools prior to the recent flurry of media and public attack.

Virtually all teachers, novice or experienced, recognize to some degree the existence of important problems in both literacy and numeracy skills. Basic arithmetic, writing (composition), and reading seem to be equal foci of serious concern, although the criteria and points of reference for standards vary substantially. Only a few teachers from schools serving economically and socially advantaged populations express more or less complete satisfaction with pupil skill attainments.

Collectively, the teachers articulate a rather thoughtful set of explanations for the present difficulties. These beliefs are held with wide currency and deep conviction throughout both separate and public systems. The real problem, they argue, is the legacy of wholesale innovation, the appealing but unworkable philosophies and practices introduced throughout the late sixties. While most teachers admit an earlier, idealistic commitment to the spirit of reform epitomized in the Hall-Dennis (1968) report, there is real unanimity in the gradual but firm move away from the reform practices and in the return to what they consider to be more traditional pedagogy, with emphases on external direction, drill and mastery of content. Of course, the teachers feel that many important lessons have been learned; they express confidence that the best outcomes of this reform period will be retained, particularly the altered pupil-teacher role relationship. In other respects, however, they remain at work within a system geared to ideals already rejected: yesterday's innovations have become today's constraints.

In particular, the elementary teachers chafe at the time pressures generated by curricular expansion, at what they perceive as a laissez-faire attitude on the part of the Ministry and the local boards in relation to curricular development and support, at the

alleged impracticality and irrelevance of their teacher training, at the pretence of individualized instruction and progress with large classes moving through a graded system, and at the continuing refusal to use grade failures as an effective sanctioning and screening mechanism.

Beyond the school, the teachers are well aware of other factors mediating their efforts at basic skill development, and they point to the mass media and to many parents as engendering values and behaviour patterns inimical to the work of the classroom. This was seen as particularly relevant to the issues of reading habits and grammatical skills.

To us, as outside observers, the practical and informed views of these elementary teachers seemed, nevertheless, to hold certain tensions or ambiguities. On the one hand, an obvious resonance of the innovative sixties was the high priority given to individual growth, expression, and development, as the prime personal educational goal of almost all our teachers. On the other hand, the same teachers almost uniformly commented upon a pronounced lack of evident pupil creativity (which they attributed to TV and generally passive recreation patterns), and upon poor work habits and student value disorientation. The schools, they apparently felt, were not only failing to build skills of the traditional order, but were experiencing a serious shortfall in relation to the very goals favoured by past innovation and current ideology.

From this point of view, the insecurity and confusion, even dismay, exhibited by many of the teachers can better be appreciated. If the philosophy of Hall-Dennis drove a wedge between theory and practice that gap has not been closed by the apparent collapse of so many promising innovative trends nor by the return to more traditional tactics in the face of widespread public criticism. A substantial number of the teachers stated bluntly that they felt uncertain and ill-prepared to find new directions or strategies for their own classrooms: the problems seemed too large to manage.

ELEMENTARY STUDENTS

As might be expected, the elementary students are largely uncritical of their school experiences beyond the level of very specific encounters, assignments or teachers. In their eyes, basic reading, writing, and arithmetic still comprise the bulk of their daily effort and their teachers' concerns. Moreover, most students find some personal enjoyment and utility in the acquisition of these new capabilities. Beyond this, they accept, almost without question, the repeated affirmation that such competencies are linked to future academic and occupational success. Only after the K-6 experience, as vague self-labelling with regard to abilities and expected career lines comes more into play, do students begin to query the personal relevance of such skills.

While but few students are avid readers, most do read for enjoyment. Again, while only a small number do any appreciable amount of writing outside the school, the majority do write letters or occasional creative pieces. Almost all students find some practical applications for arithmetic in their play or work outside the classroom. To these students, then, the learning of basics is a valued activity, for extrinsic and, to some extent, intrinsic ends. Further, there is no question in their minds that this is the preoccupation and dominant thrust of their schools, despite the public outcry of which they are largely unaware.

Two sorts of concern are expressed by the pupils, however. First, they repeatedly draw attention to the variation in emphasis and approach from year to year and from class to class. Thus, their own development appears to them as a sequence of very distinctive experiences with particular teachers. Correspondingly, most of their strengths or weaknesses are described as the outcome of particular grade classrooms. Secondly, through their participation in programmed learning and ability-level group work, the pupils are well able to define their own performance levels. While most feel that they are performing adequately in these peer-referenced terms, a number of the students are

able to locate themselves as having serious problems, even in early grades. For this group, recognition of skill deficiencies seems to be accompanied by growing negative feelings toward self and school. Thus, in a setting committed to skill development, some youngsters are uneasily aware that they are falling by the wayside, almost unnoticed.

SECONDARY TEACHERS

Where the elementary teachers defined their responsibilities directly in terms of the development of individual students, the secondary teachers, almost without exception, responded to an identical question by referring first to their subject matter, pedagogy, or organizational responsibilities. While the elementary group were client-centred in a most personal way, the secondary group thus saw their teaching responsibilities in much more restricted task- and discipline-centred terms. Moreover, it is this fragmentation of responsibility and dependence upon the work of others, inside and outside the secondary school, which seems to orient their view of the "basic skill" issue.

In Albertown, the secondary teachers exhibit a fairly strong consensus as to the existence of a serious problem, in basic mathematics as in reading and writing skills, with the deepest concern centering about the latter. Further, they are substantially in agreement that instruction in these basics is not really part of the secondary school's traditional task, either in terms of the curriculum or of their own training. Basics are assumed, and such instruction as is now being introduced, formally or informally, is purely remedial, a corrective response to deficiencies they observe and deplore. In the case of communication skills, the teachers of English would normally like to encourage the development of writing skill through incidental critique, occasional lessons or semester courses, as well as through the study of literature. Nevertheless, for some years now, high school English has centred around the cultural experience and the

challenge of ideas rather than systematic efforts toward a mastery of the mechanics of expression. Teachers and departments reintroducing formal grammar or composition lessons, to the apparent discomfort of their students, feel that they are responding bravely, compromising their real interests and literary training to meet a pressing need. Thus, by recent custom as by Ministry mandate, the English teachers cannot really define instruction in basic skills as their responsibility, while they nevertheless bear the burden of collegial criticism from other discipline areas where skill deficiencies prove troublesome. The situation is similar in respect to mathematics.

In part, these teachers see the problems as a function of their dependence upon the elementary and post-secondary sectors. Variability or lack of basic skills on entry is attributed to policies of innovation, experimentation, and social promotion in the primary setting. At the other end, the colleges and universities are perceived as competitively downgrading their entrance and performance standards in such a way as to discredit any belief in external criteria which might otherwise function as points of reference for secondary students and teachers alike.

Dependence of the mathematics and communication specialists upon their colleagues is also seen as problematic. The specialists claim that skill development cannot be effective unless these basics are retaught, monitored, and meaningfully sanctioned in all subject areas, while many of their colleagues feel that this would pose an unreasonable burden and time constraint upon their efforts in chemistry, history, auto shop, or some other programme area.

While lauding much of what has occurred under HSl, (Ontario, 1976) all teachers are quick to point out that virtually unrestricted student choice, absence of formal course prerequisites, increased semestering and lack of standardized testing do compound the problems of dealing with skill deficiencies. Difficulties are likely to be evidenced now in any course or level and to be remedied on a discontinuous basis. Teachers see the Ministry policies as a major causal factor in declining skills, then, not only in relation to what

they believe concerning primary schools, but in the secondary setting itself.

While the school administrators appeared to believe that the credit system has effectively ended streaming within their schools, the teachers themselves still view students within conventional categories, and told us this most directly. Teachers identify, for themselves, two major streams: the "five year" students (assumed to be post-secondary-oriented) and the "four year" students (assumed to be headed directly to the work world). Although the five year students were generally seen as more competent than ever before, in both social and academic terms, even this group was defined as having problems in basics, particularly in writing skills. In the eyes of the teachers, however, it is the general level courses, populated heavily by those identified as four year students, where basic skills are most critically absent and where performance standards, along with failure rates, have declined most drastically. Poor work habits and attitudes coupled with low levels of preparation and motivation seem, to the teachers, to curtail the gains which can be made here even through skilled and dedicated instruction. This group, they maintain, simply would not have remained in the school system under the less flexible curricula and standards of times past. In adapting to this decline in demands and expectations, it is the younger, most idealistic teachers who express the strongest sense of frustration, not only with their classroom experiences but with what they consider to be a "soft" organizational response to the problem. For the rest, the teachers have learned to live with the problem, which they see as partially offset by gains in retention and in the maturation of the social climate of the secondary school. They do not see any easy remedies available within the limitations imposed by their task specialization.

One interesting anomaly in the reports of the secondary teachers is evident in the divergence of individual as opposed to collective assessment. Most teachers confirmed the existence of serious shortcomings in basic skills throughout their school,

while confiding that, within their particular classroom, they were struggling in relative isolation to uphold demands and retain standards. Similarly, school administrators and department heads argued that while the problems were most serious and widespread throughout the system, their particular school had managed to retain the old curricular strengths, to avoid the excesses of frivolous innovation and to perpetuate high performance standards, especially for their prized post-secondary candidates.

SECONDARY STUDENTS

As the recipients, the terminus and focal point of all the efforts of boards, teachers and administrators, the students might be presumed to have an insider's view of the process and problems of basic skill acquisition. Yet, from inside, the educational experience appears to the secondary students as much less clear in objectives, much less rational and consistent in implementation.

In one way or another, almost all of the students pointed out to us the radical inconsistency of their own language learning experiences in the schools. Spelling, grammar, and writing skills had been virtually ignored by some teachers while emphasized by others. Some students had received no instruction in writing skills over a period of several years, encountering a sudden heavy emphasis in grade nine or in one of the senior grades. No consistency in values or practices are apparent to them across schools, subject areas, or individual teachers. To the students, the stringent demands for improvement in writing skills in some grades or from some teachers appear, then, as both arbitrary and unpredictable.

If classroom expectations appear as erratic, even irrational, it is perhaps not surprising that the students generally view official goals and rationales with detachment and some suspicion. Generally, the students assess their language skills in a purely instrumental and utilitarian context, rather than as an expression or presentation of self, to which pride or

shame attaches. Most state that they would have wished for a more thorough and continuous preparation in writing skills (spelling, vocabulary, sentence structure, grammar, organization and style), but for very pragmatic ends such as better marks, teacher approval, post-secondary entry, or completion of job applications. While accepting such proximate practical goals, many students, particularly from the four year stream, view the standards involved as being artificial and personally meaningless. What should it really matter, they argue, how they spell, write or speak as long as they, or their friends are able to understand? In any case, these students do not see that written communication will enter in any important way into their future work or life-style, and mistrust the school's repeated assertions regarding the absolute necessity of such literacy levels. Only students near the end of their secondary programme, oriented to post-secondary work, see any larger role for their writing skills, but even here extrinsic academic demands seem to be the primary motivation. From these perspectives, most students are inclined to rate their present skills as being more satisfactory than is indicated by formal school assessments, particularly in view of the indecisive and variable application of school standards and effort. As the students notice repeatedly, both the curricula and the teachers' expressions of intent give far more attention to these matters than actually develops in the classroom or in the grading of the students' written work. The students, naturally, draw a lesson from this dual standard.

Most pupils are not heavy readers, and a small minority do not read at all beyond their school requirements. Basic ability to read did seem, however, to be a matter of personal pride and relevance, or even urgency, for youngsters recognizing disabilities. From those students entering secondary school with weak reading skills, we heard expressions of embarrassment and bitterness. While attempting to "save face" with peers and teachers, such students admit an inability to handle text materials at their grade level and confide their sense of shame and resentment in situations which

expose their weaknesses to the classroom. They do not consider that they have been favoured by the string of "social promotions" which has advanced them beyond their admitted capabilities. Students overtly streamed into remedial classes or schools express relief from these pressures and a sense of achievement derived from work at a manageable level. Albertown students were uniformly enthusiastic about the various reading laboratory and remedial reading programmes for high school entrants, but were much less enthusiastic about the renewed efforts at formal instruction in grammar.

In the eyes of the pupils, secondary school studies in English revolve overwhelmingly, if not exclusively, around the appreciation of literature. Discussion of content, character, ideas and issues derived from assigned plays, novels, or poetry appears to them to be the dominant interest and concern of their teachers. Thus, the election of English options is seen more as a challenge to existing capabilities than a reliable approach to skill enhancement.

Mathematical skill was generally regarded as having a higher value than literary abilities, particularly by students looking toward the post-secondary setting. These students felt that mathematics would be required for a wide range of technical and scientific studies. By contrast, pupils who saw themselves entering the work world directly were critical of the emphases and weight of secondary mathematics programmes. What they required, they felt, was much less abstract and far more applied skill, related to prospective trades. The secondary programme appeared to them theoretical and irrelevant. Still other students defined themselves as having no need whatsoever for basic numeracy skills: they emphasized the routine availability of calculators, cash registers, or other technological aids, as well as the services of tax or accounting experts. Among the students, two distinct kinds of mathematical career lines are recognized. Some "turn-off" just before or after secondary school entry and henceforth either avoid all mathematics or elect but few courses at a general level. Others seem to pursue mathematics consistently and successfully throughout their

secondary years. Among the former group, those who aim at post-secondary work have set their sights upon studies in the humanities and social sciences, where they believe that mathematics will not be required.

In our community, incoming students did not perceive courses in mathematics or English to be options. They firmly believed, and reported to us, that these are required subjects. In many cases such courses were already filled out on the "option sheets" which the students received in grade eight. It is only later in the programme that students confront any real choices. Overwhelmingly, the students favoured less rather than more choice regarding basics, and retrospectively the senior students voiced strong support for a required core.

Finally, a larger number of students made unfavourable comparisons of the levels of interest and attention exhibited by the secondary teachers as opposed to those in the elementary setting. Recognition of individual problems, concern and personal attention seemed, to them, to have given way to impersonal instruction and assessment in which initiative was theirs alone, and responses often pressured and perfunctory.

EMPLOYERS

Our concern with employers rests on the evaluations they made of the education levels of their new employees, and the opinions they expressed about them. While these are but two facets of the complex role of the employer, they are the most consequential for this study.

Employers make many criticisms of education in Albertown. They believe that the current system permits students to avoid the hard courses. They believe that students are evading the useful courses too. In their eyes, students are unrealistically neglecting such elementary things as to be able to write and spell.

They believe that the schools should, in general, be more vocation-oriented. This is not to say that they consider vocational training as the major goal of

education - far from it. But they feel that the schools produce students who are abysmally ignorant of what the world is like. For the employers, the real world is one where work is highly important. They see schools as conspicuously disengaged from real life in the avoidance of drudgery or authority, by way of examples.

Most employers confess that they have little first hand knowledge about the schools of Albertown; however, their opinions are based less on any personal acquaintance with schools than on accounts of friends and fellow employers. Few of them participate in the "work weeks" in which students can visit work places.

Their views on employees in general are far from flattering. In their opinion, workers stay off the job for little or no reason, and throw up their jobs over trivial matters. Most employees are unwilling to work hard, and are content with work of sloppy quality. Moreover, workers are ill-prepared to accept the essential authority of the work organization. In general, they lack a sense of responsibility toward equipment, materials, and those things that go into getting the job done. Most lack the sense of performance that adds up to self-respect as a worker. In brief, the employers present a picture of employees who are poor workers and poor parts of their organizations.

The employers expressed little interest in improved means of selecting new workers. That is, they had not set up elaborate provisions to choose carefully the right person for the available job; nor had they instituted systems of training by which the worker would be helped and coached as he fitted into the work routines. Neither the testing nor training procedures were of prime concern.

In this context, the employers appeared to fall into two categories. For the white collar jobs they preferred "overschooled" workers. Bankers would select university graduates as tellers even though the work appeared to require only grade six schooling. Such employers seemed eager to up-grade their employees in terms of "paper" qualifications. On the other hand, employers of blue collar workers leaned in the opposite

direction. They preferred the more poorly schooled employee, or the school dropout, noting that the worker with little education was more likely to be satisfied with blue collar work, and also come to work regularly.

The employers expressed almost no concern about their workers as persons, but viewed them largely as instruments to serve the work organization. The younger workers, by contrast, have tended to emphasize self-fulfilment, and "doing your own thing". In this context, neither has much sympathy for the point of view of the other.

EMPLOYEES

The focus of this section is the recent employee, specifically the one who has said farewell to secondary school and has sought permanent employment. Each year such persons enter the labour market in a great wave. Up to this point in time, all secondary students have been officially treated as equals. At this point a fateful decision is made. Some students select the option of entering the adult world of work. Most of the rest remain as semi-adults, and they begin the long crawl through the post-secondary system.

Those who choose work and adult status discover that very few occupational doors are open to them. The reason is simple and single. Even in the conditions of a relatively tight labour market most employers want experienced workers. The new workers have had some experience, but not necessarily the kind needed. Indeed, what is remarkable about students in Albertown is how many of them have carried jobs along with their schooling. But the experience at the gas pump or in the restaurant is not negotiable in exchange for a job behind a typewriter or operating an expensive machine.

There are, in effect, two main kinds of jobs available to the above students in Albertown. The first and most numerous is in factory production at the unskilled or semi-skilled level. The second is in the business office, the clerical field. Traditionally the first was a masculine world and the second a feminine one. But this has changed. In neither of these can

the worker put to use the skills and knowledge gained in secondary school. The jobs are simple, repetitive and undemanding.

There are exceptions to the above. A girl with gifted hands and eyes may turn these to good use in hairdressing. A boy with a relative in a government office may secure a job as a letter-carrier and receive an astonishing income for a very modest set of tasks. But the exceptions are rare.

Why do the students move into jobs so unrelated to their lengthy academic careers? The reasons differ according to family background. Some families have encouraged and planned so that the student moves with their aid into paid employment. In other cases the family simply refuses to continue to support the youngster any longer, and ejects him into the work world. In another set of circumstances, the youngster has no available family support and has launched forth on his own resources.

Most of the student workers had not learned how to get to work on time, nor how to discipline themselves to attend every day. But they are pleasantly surprised at how easy this is to learn. Indeed, many are proud of this evidence of their "adult" sense of responsibility. Apparently, the employers would still like an improvement in these matters, but students do seem ready to leave the casual atmosphere of the school behind them.

Office and factory work came as a shock to most students. School has not prepared them for sustained work carried on at a rapid pace. The girl who stands at the assembly line packing butter reports that she handles one hundred and thirty-nine pounds per minute. Breaks away from work come very infrequently, and seem extremely short. Most find it hard to adapt to the pace of work. A few prefer a faster pace than the one that the others follow, and get into trouble accordingly. Others find the pace too demanding, and start feuds with the foreman or lead hand.

Some student workers find themselves in situations where the work pace is irregular and hectic. But for most of them, the pace is too regular and is

experienced as monotonous. For the general run of workers, the work place is a boring one. The student becomes a clock watcher. For many the boredom becomes a threat. "You try to think of things to think about."

None of these workers describe the work as tiring. Since many of those who help set the pace of work are two or three times as old as the students, this is no surprise. The work does not tax the young ones physically.

If the work makes modest physical demands on them, they feel that it makes trivial intellectual demands. "The only writing you have to do is write your name on your pay cheque. And you can scribble that." Some workers, doing addition on calculators, try to race the machine by using mental arithmetic. Almost without exception they find work unsatisfying.

COLLEGE TEACHERS OF APPLIED ARTS AND TECHNOLOGY

Among the college teachers there is marked differentiation. Some (such as those who teach nursing) are involved in three distinctive sorts of tasks. That is to say, they try to give a rigorous technical training to the students; they transmit a serious concern in specific scientific subjects, such as biology; and they provide a broad range of service courses to round out the programme.

By way of contrast, the teachers in the secretarial programme offer a technical training, but there is no body of scientific knowledge in their domain. So while the nursing teachers can think of themselves as giving professional (or at least semi-professional) education, the teachers in the secretarial field are involved merely in providing technical skills. While they are all colleagues in the college there is an invidious difference involved. (The secretarial programme, like that of nursing entails several service courses, English, Psychology and Sociology).

In both of the above programmes, some of the teachers are at the centre of the craft, and others at the periphery. The teachers of typing, for example,

can readily view themselves as more consequential than those in the service courses. These kinds of distinctions do not go unnoticed by students because they, like the teachers, view some courses as very important and others as of questionable consequence.

In the case of the shop courses (the traditional masculine technical programmes such as auto mechanics, and welding), one notes again a set of central courses built around the technique, plus a fringe of service courses such as English and mathematics. In these programmes, the "core" teachers may have little respect for the service courses. Indeed, they may see them as feminine frills as opposed to masculine skills. The students may make the same invidious evaluations of the courses and their teachers.

The role of a teacher in the Community College reflects the position he occupies in this framework of programmes and courses. That position in large part determines the amount of prestige and influence he wields in the college. On the other hand, his position is also greatly affected by the number and quality of students that are attracted to a given course. Some courses have so many applicants that a rigorous screening of students can be made. In other courses, almost any applicant will be accepted. Some teachers therefore are dealing with the best products of the secondary schools. Others are working with the drop-outs of those schools, or with their unpromising schoolmates who were promoted routinely in spite of their inability to handle the work of the secondary school.

COLLEGE STUDENTS

In Albertain, the college students are a highly varied lot. Since such colleges serve a community, they come in the course of time to reflect the whole population of the community. While the students have common characteristics, it is useful to keep in mind their differences and the varied demands they make on the college and its programmes.

Some of the students, such as nurses, have a professional (or semi-professional) attitude to their studies. This implies that they are learning a complex body of skills, which are both technical and social in their nature; that they are studying the scientific rationale for their skills; and that they are gaining, through humanistic studies, an understanding of the social milieu in which they will work.

Other students have come to develop or refine clerical skills. In their case the skills are almost entirely technical in character. Their cluster of skills (such as typing, shorthand, grammar, and spelling) do not involve any study that can properly be labelled scientific. They may also study humanistic studies, though the relation of these to their work milieu is very slender.

Still others have come to learn technical skills relating to complex machinery, for example automobile mechanics. They deal with the world of things, rather than the paper shadows with which secretaries deal. Their studies are intensely practical matters devoid of theoretical content, and comprising a minimum of mathematical and humanistic knowledge.

Another recognizable group comes for courses of study that are so short that any certificate of attendance is incongruous. These courses are tailored to fit a particular problem area of a particular group of workers. Such courses characteristically lack any formal examination or other form of assessment.

One group of students comes, not of their own volition, but because they have been directed to the college by the Manpower Centre. They may be sent there to upgrade academic qualification to a specified level, or to improve their standing enough to be admitted into some vocational course. Most of these experience the difficulties here that they had earlier in secondary school.

What have these students in common? In general, they are goal-oriented. Unlike students in elementary and secondary school, for whom education is often a custodial experience, these students are oriented to opportunities in the world of work.

In general, they are oriented specifically toward a certificate. They want to obtain the credentials

that open the doors to their chosen and exclusive occupations. The paper credentials have a crucial importance for them.

They tend to be impatient with studies that are not central to their vocational interests. Some parts of the curriculum they consider essential, and some parts they view as irrelevant.

Finally, they tend to be oriented not to the college but to a work place beyond it. The nurses felt much more at home in the hospital than in the classroom. The mechanic prefers the garage work-bench to the classroom desk. It is doubtful that they ever think of themselves as potential alumni who might come back for a college reunion to celebrate this identification with an academic institution.

UNIVERSITY TEACHERS

Albertown, like most large Ontario communities, includes a university among its educational institutions. Unlike those other institutions, the university serves a widespread population. Students come to it from other communities, while students from Albertown may go far afield for university training.

Traditionally, the university teacher has taught students who completed the five year system. More recently, less qualified students have been admitted (mature students, for example). Traditionally, the university teacher is a highly specialized academic. This intense preoccupation with his own field of expertise makes him generally insensitive to other fields. And this extends, where applicable, to English and mathematics. In general, he is not highly aware of student qualifications in these areas, nor of the changes therein. Often, he sees too little of the actual work of students to permit him to make judgments in these regards.

In Albertown University one encounters occasional discussion of the low level of student preparedness with respect to language. On occasion, teachers would express deep concern over this state of affairs; on other occasions they would philosophically recall the

shortcomings of their own fellow students, as well as their current colleagues. The concern over standards emerged to a different degree in various sectors of the teaching faculty.

In the social sciences and the humanities there was recognition of inadequate standards in language, but no substantial efforts, individually or collectively, to rectify the situation. Indeed, the interviews with teachers seemed to indicate that many faculty were adjusting, without strenuous objections, to the level of reading and writing skills that the current students display. Many were substituting objective tests for traditional written tests; some were substituting discussion groups for written assignments; some used types of work books that freed the student from the major task of organizing the body of knowledge of the course in which he was enrolled; and, in general, there was a tendency for pedagogy to devise new strategies that put decreased emphasis on reading and writing.

On the other hand, the faculty in the physical and biological sciences and in the associated professions were requiring their incoming students to enroll for one term in an English course that stressed simple reading and writing skills. They found it difficult to teach courses to students who, in the eyes of some of them, were sorely lacking in basic language skills.

The most concerned faculty were in the fields of English and mathematics. They were making varied efforts to retain what they considered to be the historic standards in their respective disciplines. They did this by trying to monitor the preparedness of students for work at the university level, by assisting other departments that were trying to improve standards, and by joining with their colleagues in other universities and members of their professional associations, to generate a public concern for standards of excellence in English and mathematics.

UNIVERSITY STUDENTS

At first glance, one is impressed by the variety among university students. Some have an early and complete commitment to an academic career. They started early to think of continuing their education in the university. They developed competence in the tools of the trade (effective writing; skills in composition, grammar, and spelling; skills in mathematics; and mastery of conceptual schemes) as essential adjuncts to their work in the sciences, the arts, or whatever programme they have chosen. Moreover, they have maintained this orientation to university work; they see university work as an essential prelude to the professional school such as law, or the graduate programme they anticipate. Other students present a truncated commitment to university work. Their career ceilings are lower and their time commitments are briefer. They want early access to a job (teaching, hotel management). They are not concerned about polishing their academic skills beyond the immediate needs of immediate courses. There are still other students for whom the university is largely a place of uncertainty. They are uncertain as to what career they hope to follow, uncertain as to the demands of the courses they follow, and uncertain as to their own academic skills.

The variety among students is revealed in several ways. One is the sheer amount of work done, and the pace of work. Some attend classes regularly; others attend for a while, or borrow lecture notes from the more diligent student. Some study vigorously; for every class hour they manage two to three hours of preparation. Their work weeks may involve fifteen hours of classes and thirty-five to forty hours of personal study. Others report minimal effort beyond classes and laboratories. Some begin the semester at a leisurely pace and postpone both study and the preparation of assignments until several weeks have gone by.

Some students have generated for themselves a set of standards of achievement which they impose on their various courses and assignments. In a way, they create

their own curriculum (in the historic sense of the term). Others pit their efforts against an unrecognized set of standards, and are frequently astonished at the congruence (or lack thereof) of their efforts and their achievements.

As noted earlier, some students have committed their lives to the requirements of an extended academic career. They state firmly that it has first priority; their other interests are fitted into their career pattern. Others have made no such break in their lives. Their life-style proceeds in established familiar grooves. They foray forth to attend classes, but return home for meals and companionship and part-time jobs. The ties to home, family, and neighborhood take precedence over the elements of university life. The one type of student is a free cosmopolitan; the other is still bound in a framework of local ties.

Beyond this diversity, one can note some basic similarities among students. Almost without exception they pass critical judgments on the deficiencies of their high school programmes in mathematics and particularly in writing. Those who are doing well in university wish they had had more continuous aid in writing; those who are doing poorly (who see themselves as "wrotten spellers") wish they had been taken in hand early and helped to gain skills and competence in writing.

Almost all report that these deficiencies are widely aired in secondary schools and in post-secondary institutions. They report a litany of complaints by teachers at many levels, on the one hand, but on the other, almost no effort to provide a constructive solution for their shortcomings. These students realize that they are poorly prepared for the traditional demands of post-secondary education, but their teachers seem content to scold and criticize, rather than offer remedies.

Most of the students have discovered that their deficiencies are not an insuperable barrier to post-secondary education. They have discovered ways of ignoring large parts of assigned readings, and of substituting oral communication for written work. They

find that post-secondary teachers have adapted to their deficiencies; that they accept point form comments in place of sentences, that they minimize the amount of writing required, and they generate teaching procedures and methods of examination that do not require either sophisticated reading skills or minimal writing skills.

Our university students, in brief, formed an impressive continuum; some represent the best traditions of scholarly achievement, while others lack the basic skills associated with the elementary school.

SUMMARY

The ten groupings all have their own points of view on the matter of basic skills, and these reflect their place in the worlds of work and education. Among these perspectives one can note some overriding similarities.

Among students at all levels there is a widespread sense of malaise regarding their competence in the basic skills. At the core of this is writing, but shortcomings in elementary mathematics are also noted. Those enrolled in university courses, particularly in the humanities, report such handicaps. So also do those who are enrolled in college courses. But it is from secondary students that one gathers the more distressing report; they recall much shifting of teaching methods in their school years, they find themselves ill-equipped in the basic skills, and they report wide gaps between what their teachers say they expect of them and what they actually require of them in terms of achievement. There is a wide gap between the ideal standards and the real standards of the secondary schools. Students, in general, are dissatisfied with their training in the basic skills, and to a large extent would welcome a more rigorous framework.

In similar fashion, teachers too, at all levels, report dissatisfaction with student competence in the basic skills. In both the scientific fields and the humanities one hears of a need for remedial work in the

universities, and the same opinions are expressed by college teachers. The secondary teachers express dissatisfaction too, most particularly with respect to students not proceeding to university work. At the elementary level there is near universal recognition by teachers of inadequacies in writing, arithmetic, and reading. Although teachers at all levels appear to document the lack of competence in the basic skills they are far from a consensus in explaining its roots. The post-secondary teachers locate the problem in the secondary schools, and cite the lack of standardized terminal examinations. Secondary teachers, however, see matters differently. They divide the blame between the elementary schools and the universities, claiming that the latter have diluted their standards surreptitiously. Those who teach English and mathematics are designated as culprits, though they contend that they cannot single-handedly carry the burden. Elementary teachers put the blame on a crowded, cluttered curriculum, and on the uncertain directives under which they work. In brief there is little consensus amongst teachers as to the source of the difficulties they encounter.

The most obvious gap in perspectives, however, is that between the world of employment and that of education. The job opportunities available to secondary students require only a miniscule part of the basic skills that the schools try to provide. This was more the case for factory jobs than clerical jobs, but still true across the board. Moreover, employers deplored the kinds of work habits displayed by the students who came for employment. Between the world of work and the world of schooling there stands not a gap but a chasm. Beyond this, employers readily confessed that they were basically ignorant of what the schools were trying to accomplish.

These reports from persons most involved with the problems of learning and applying skills constitute a first level of inquiry. From these encounters with the *dramatis personae*, we move, now, to another level of analysis, that of the four institutional sectors comprising Albertown's worlds of education and work.

Chapter III

The Elementary Sector

Our search for an understanding of skill-learning began in the elementary schools. Although our initial day to day observations concerned the pupils and the teachers within the classroom, we eventually turned elsewhere for an interpretation of their successes and failures. We looked, on the one hand to the neighbourhood, family, and media backgrounds which engulf the school, and on the other hand toward a long background of problematic innovations in the organization and goals of the school itself.

Albertown has some thirty-five elementary schools, including twenty-three public schools, of which nineteen are K-6 (kindergarten through grade six), two are K-8 and the remaining two, sometimes designated as "junior high schools", are seven and eight only. Of the thirteen separate (Roman Catholic) schools eleven are K-6 while two "junior high schools" are seven to ten. Public enrolment was approximately nine thousand at the time of our study, while separate enrolment was somewhat over four thousand pupils.

In size, the schools varied from less than two hundred in some K-6 settings, to nearly one thousand pupils in other K-8 situations. While the bulk of these schools were three hundred students or less, the senior public and junior high schools were typically much larger.

All areas of the community are served by both boards, although separate school expansion into the growing suburban areas has been somewhat slower. Albertown has had the dual system virtually from the beginning; the two boards are thus well established, respected and accepted. Of course, this has not always been the case in Ontario communities, where late entry

of the separate schools has, on occasion, created deep rifts and rivalries. In this community, some friction has been generated, however, by the recent (1972) extension of the separate school system from grade eight to grade ten, involving the creation of the new junior high schools. This has been a fact of some importance in terms of cooperation and student career lines.

As in most Ontario communities, the effects of post-war expansion, affluence and separate school equalization grants are evident (Ontario, 1963): the majority of school buildings both separate and public, are relatively new, refurbished or enlarged. While a few of the earlier schools are still in use, notably in the older and less affluent areas of the city, most of the pre-war buildings have been phased out.

FAMILY AND NEIGHBOURHOOD INFLUENCES

The significance of family and community background for educational attainment, motivation and aspiration is well documented in the sociology of education (Husen, 1968; Purves, 1973). Moreover, the established patterns of influence have been documented for Ontario in studies by Anisef (1973, 1974), Blisshen (1971), Breton (1972), Carlton (1971), George and Kim (1971), Hall and McFarlane (1963), Harvey (1971), King (1964), Lagace (1968), Lennards (1973), Pavalko (1966), Pike (1970), and Porter (1965) among others. It is not surprising, then, that these background factors appeared as critical determinants of elementary school experience in Alberttown.

The elementary school is linked to community, ethnic, and socio-economic factors in a more immediate and influential fashion than are any of the higher levels of schooling. Although each school is virtually identical in programme, each recruits from a relatively narrowly bounded geographic base. These schools, then, reflect in the most intimate way the customs and conditions of their community and clientele. Local variation in cultural background, education levels, income, family life, housing style, or community

resources is reflected in the students' skills and motivational levels, parental involvement, and the relationship of teachers to the area. Although most schools in our community draw on some mix of neighbourhoods, a definite character or ethos is evident in each of the K-6 schools. It is visibly related to the population served. Significantly, these differences correlate with and appear to account for the greater part of variability in skill performance levels, both within and between schools, on the basis of such evidence as we were able to obtain. On a number of standardized tests given throughout the community, for example, schools from upper socio-economic neighbourhoods were consistently ranked highest, while inner-city schools from disadvantaged neighbourhoods and public housing areas scored lowest.

Variation in the parental education levels, related to income and other life style indices, contributes to an extraordinary differentiation in student skills, deportment, interest, and background, evident when the child first encounters the school in kindergarten. Through comparison of schools serving older, lower income regions, and those located in upper middle class districts, we were able to confront, observe, and document such differences. In important ways, pre-school and extra-school socialization affects numeracy, literacy, deportment, cultural experience, family support, and parental relationship to the school.

By way of example, children from advantaged areas generally arrive at school with some basic number recognition skills: by October, the kindergarten in one such school was counting to thirty, with a substantial proportion of pupils able to recognize and reproduce the numbers. In an adjacent school serving an impoverished neighbourhood, with a smaller class and a more experienced teacher, sixteen kindergarten students were observed in number recognition at the same point in the year: five recognized the number "1" only, while three knew only "1" and "2". Thus, half the group knew only two numbers, and only a couple of the remaining pupils could count to ten. Their teacher expressed her dismay in this way:

In the age of Sesame Street this is surprising! It isn't working. Those programmes were aimed at the lower economic groups, but they aren't getting through to our pupils.

Such differences cannot be accounted for by brief experiences in the school, yet they are crucial to the acquisition of the basic arithmetic operations taught throughout the grades which follow. Through conscientious and sustained effort, this gap is closed somewhat by the schools, but it is certain that it is never really eliminated for these groups.

In advantaged areas, reading skills and interests are also likely to be cultivated extensively in the home prior to and concurrent with the elementary school experience. The teachers in such locales identified this family support as the single most important influence upon literacy skills, and recognized the favoured nature of their upper middle class clientele:

We have the cream of the Albertain kids here!

It's amazing what an advantage reading at home gives!

I taught at (school Y) for three years - the interest in reading there was poor: reading was not a habit in those homes. Around here there is more interest in reading, but kids here are more sophisticated, wordly wise; they like things to move faster!

The background variables described for us by these teachers were apparent in the reports of the students themselves. Parental reading, support of children's reading, and control over television viewing were patterns typically reported by the children of professional or other well educated parents. Of course, there are reading problems with some children from such homes or neighbourhoods, but many exhibited

the kind of discipline shown by the following student whose father is an educator:

I read an awful lot, after supper and before bed; thirteen books so far this year. I don't watch television at all during the week. It's a rule of my father's.

By contrast, the son of a taxi driver attending an inner-city school reported:

I don't read very often: only the instructions for games or toys. I watch TV about four hours every school day and about eight hours a day on weekends.

Reading and television viewing certainly appeared to vary inversely for the pupils, along socio-economic lines. Television viewing of over thirty hours per week was not uncommon for those students who had not developed a habit of reading for pleasure.

The media habits of the Albertown children appeared consistent with available provincial and national data, although our attention was drawn repeatedly to the significance of socio-economic class variation amongst our respondents. Table II offers a sketch of television viewing habits for the larger provincial and national school populations. These data show a dramatic decline by grade through levels six to thirteen, which suggest either a shift in activities as the youngsters mature, or a process of selection favouring students who make other use of their time. Our observations in Albertown indicate that both these processes are most probably at work. In this event, it can be hypothesized that lower socio-economic class origin, involving lower educational levels in the home, higher rates of television viewing, and lower rates of educational longevity may be meaningfully interrelated.

Teachers serving neighbourhoods with lower levels of family literacy were quick to emphasize the home and

Table IITELEVISION VIEWING HABITS OF PUPILS, GRADE 6-13,
ONTARIO AND CANADA

Median Weekly Hours Viewing		
	Ontario	Canada
Grade 6	17.8	16.9
7	16.6	16.2
8	15.4	14.8
9	12.8	13.1
10	11.2	11.4
11	9.5	9.9
12	8.3	8.4
13	7.4	7.4
All Grades	13.2	13.2

(Source: Statistics Canada, "Socio-Cultural Characteristics of Elementary and Secondary School Students", Occasional Publication 81-561, 1971, pg. 75)

family media habits as important sources of learning difficulties.

Our school puts the emphasis on reading, because of the uniqueness of our population: they have a dire need to catch up two or three years in their educational development. In X School, for example, the kids come from middle class homes. The parents talk to their kids, have books at home and have given their children broader experiences such as travel or cottages. The children speak distinctly, have a wider vocabulary, better diet and health, and stable homes. Our children here are two or three years behind in reading readiness. We have to catch up on the experience of those (middle class) children. Forty per cent of our pupils come from broken homes; there's high parental unemployment and a low parental value placed on education.

As one teacher put it, in commenting upon the public housing children in her otherwise middle class school:

Reading variability is evident in the first month of school. Problems start when the child finds he's not reading quickly. He cruises till grade three or four, then it gets to be a real problem.

Parents generally are behind reading problems. When both parents are working, they're too tired to sit down with them and spend time.

These observations, as well as those which follow, reveal the teachers' perceptions of the degree to which home and neighbourhood affect not only pre-school skill attainment, but deportment, motivation, and levels of parental support. Parental attitudes and involvement in the school were observed and reported by the teachers as differing meaningfully according to the "class" of the neighbourhood:

They're a mixed group before they ever start school. Encouragement at home is important, and some parents just don't care; the mother and father don't have time to discuss school with the kids.

Kids reflect the attitudes of the parents; they don't want to be at school; see the school as a hindrance... authoritarian figures putting restrictions on them.

Most frequently, the teachers commented upon motivational and attitudinal factors as rooted in class-based family and life style differences:

Around here we have the old upper middle class parents, and the kids are worried about marks. Report card day is something to see around here.

The main source of learning difficulties is attitudes... the values of the students themselves, the parents, the home and the neighbourhood. (The pupils) from lower middle class can't relate to school, period. The public criticizes the school, but they don't recognize the role of the community in the lives of the kids.

Poverty is the hub of the wheel... these kids don't have safety or security; how can they possibly take education seriously? It's irrelevant: too far beyond them.

In our community, some kids come from homes where they are expected to perform. Others don't see why they should behave or come to school at all: it's family background.

Our population is above average in socio-economic status. They're mobile parents moving from one job to a better one. They're aggressive and it spills over to the kids.

One teacher in a inner-city school expressed his concern about the disadvantaged home background of his pupils in the following way:

I wonder whether the parents really take an interest: one parent didn't want his child to have homework because it interfered with his television viewing.

From the same school, a grade seven teacher reported:

I have had to send letters home to parents to help in motivation regarding drill (in basics). The response was apathetic.

The majority of our students are from a low socio-economic background. Parents care but are ill-equipped. Students arrive at school with problems. The remainder are middle class, and have entirely different expectations of school and teachers. There are two sets of expectations: for the teacher to do both, it's a Jekyll and Hyde performance.

Again, in a senior school with a radical mix of neighbourhood backgrounds one teacher noted:

There's a small minority, about twenty per cent... no matter what you do it is negated outside school. From kindergarten on we give them special attention, but there's only about a five per cent result.

Remediation, appropriately, begins at kindergarten level in some schools. A further year prior to grade one, termed "reading readiness" class, may be required of the weakest incoming students in the inner-city schools. This year is given over to the enhancement of

very basic auditory and visual recognition skills, and to the development of other factors including general cultural background, work habits and group behaviour. Even with a handful of students under a skilled teacher, the year generally cannot bring these children up to the levels exhibited by many peers on arrival. Both parents and pupils, moreover, are reluctant to accept the loss of a school year, and many actually equate these classes, initially, with the regular grade one, expecting that the students may next proceed to the second grade. Teachers and administrators are under subtle but very real pressures, from both inside and outside the school system, to return these children to the regular classes as rapidly as possible. Although the term "streaming" is never used, some schools do manage to keep such skill-deficient pupils apart for several years by returning them to "split" grade one and two classes. Not less, but rather more of such effort appears necessary, given that the factors responsible for weakness in pre-school skills and motivation are generally still at work throughout the whole elementary career of the pupil. Parents, however, do not yet accept the notion that some children can, in effect, "fail" kindergarten. Such failure reflects upon the parents and the home in a most obvious way.

Of course, the importance of family and neighbourhood influences is not in any way surprising, and our community experience adds little to what has already been explored in the enormous literature on stratification and educational achievement. What is surprising, however, is that the debate over the effectiveness of basic skill instruction has tended to ignore just these ever-present factors. At intake, the elementary school is called upon to work with some children who lack the expected social or cognitive age-level skills as well as favourable attitudes and values. Sociologists have long recognized the degree to which this mitigates against the achievement of such pupils. In some schools it may be but one segment of the student population; in others it may be virtually the whole clientele.

It is important to emphasize that the socializing pressures of family and neighbourhood persist, in many cases opposing or negating the strivings of the school. There exists, then, a visible minority whose acquired skill levels begin and are likely to remain substantially below the attainment of their favoured peers. As they move through the school system, their skill deficiencies will become visible at new levels and in new milieux.

Attention to the profound impact of these extra-school factors recalls for us the basic limitations of the school system, which cannot be held accountable for variability over which it can exercise little control. Our age has placed unprecedented value upon education, and invested accordingly. Yet we have not, perhaps, attended sufficiently to the real limitations of the school as a socializing agency, as over against the forces of family, community, and media. The school has been and continues to be most effective where continuity of experience brings about a consistent and thorough socialization. Thus, the efforts of an egalitarian school system may narrow the gap between those whose background prefigures and supports the basic skill demands of the school and those who are less fortunate, but it is unlikely to eliminate the differences. It may, in some respects, still tend to enhance them.

In sum, variation in skill levels, both within and between schools appears to owe a great deal to factors lying entirely outside the school. If there is heterogeneity in skill attainment within the school it is in some large part because the community outside the schools is heterogeneous, crucially influential, and beyond the reach of the educational system. This is the first parameter which has to be recognized in explaining any skill deficiencies which may be visible at the outcome of elementary schooling, or indeed in higher levels of education.

"GETTING BACK"; THE RETREAT FROM INNOVATION

The pendulum has swung very much to discovery method, without drill and without discipline. I'm glad to see the pendulum is coming back. Many kids suffered as a result of experimentation. You can't use them as guinea pigs!

We're going back to the old methods. For a while we let the kids do what they wanted, but we found it didn't work. Now we're going back.

A decade ago we got away; now we're getting back to basics. We got caught up for a while in change for the sake of change.

There is a realization that in the last fifteen years some of the ideas put into practice were idealistic - not working out as expected. There's a return now to formal instruction in grammar and application to composition. Some traditional values and methods were tossed out merely because they were old - very unfortunate.

In comments such as these, the elementary teachers recounted for us their disillusionment growing out of a decade of innovation and experimentation. The reports of the students, as well as our own observations, confirmed that the schools are indeed backing away from those progressive philosophies and practices which set the educational tone in Ontario throughout the sixties.

Throughout that decade, most educators and administrators in the Province had become committed, in some degree, to the prevailing spirit of reform and to the task of reshaping the schools on a more individualistic, student-centred foundation. It was believed that the traditional routinized pedagogy, the formal classroom format, the narrow core curricula and the tight external performance standards were unsuited to the new demands of a heterogeneous and complex post-war society. The schools, it was argued, were

failing to meet the needs of distinctive ethnic, rural and economically disadvantaged populations. The goals of retaining more pupils, of upgrading the educational level of the whole community and of maximizing the utilization of available talent were seen as crucial political and economic objectives, under the influence of theories viewing education as investment. More important, the traditional system was thought to have inhibited or repressed individual expression, interest, and creativity, goals which had special symbolic significance for an era concerned with the "dehumanizing" effects of bureaucratization, mass media, and urban anonymity. If there was a keystone to the reform structure which gradually took shape, it was caught in the cliché "child-centred", or "student-centred". Pedagogues found it meaningful to assert that they were teaching "children, not subjects", and that education would have to begin "where the child is at". What followed from such slogans, however, was an extremely consequential shift, not only in pedagogy and curricula but in the social relationships and organization of the school. Ideals of individualized instruction and continuous progress were translated into ability-level group work and social promotion, replacing the old lock-step grade promotion system. Such extensive group work required new facilities or tactics, such as the open-concept school and team-teaching arrangements. Curricula were enriched and expanded to provide variety as well as a stronger sense of immediate relevance to the pupil. Instructional strategies were modelled as closely as possible upon the natural processes of "discovery" and "incidental" learning which were thought to characterize the pre-school and extra-school environment. Perhaps most significant, however, was the new weight attached to the person of the child himself, to his social development as an explicit goal of the school, and to his capacity for decision-making in the course of his own education. With the recognition that self-concept had been an important factor intervening between ability and achievement, the new school environment was designed to maximize the student's positive self-image, both through the

encouragement of his personal expression and the deliberate suppression of any negative feedback on his performance. Inadequacies were ignored. All of this had a profound effect upon interaction patterns, as the teacher moved from the "source of knowledge and power in the classroom", as one Albertown teacher put it, to a more egalitarian and respectful relationship with his pupils.

Yet, after little more than a decade, much of the recent pedagogy is now being abandoned by the teachers and their schools, amid the din of assault from a parental public, the work world, and the settings of higher education. Why?

From our interviewing and observation in the Albertown schools, we were able to disengage the strands of seven interwoven problem areas. Each of these sheds light on the current difficulties of basic skill acquisition, while contributing to an explanation of the reactions now visible in the schools. We explore, first, three problem areas arising out of changes at the level of the larger educational system: (1) the changing role of the Ministry, (2) the enrichment of curricula, and (3) teacher preparation. The concerns which follow, (4) teaching methodology, (5) grouping and continuous progress, and (6) student attitudes and work habits, reflect adjustments made by teachers or pupils at the level of the school and the classroom. Finally, our attention rests upon the troublesome question of (7) performance standards.

The Role and Support of the Ministry

During the past decade, the Ministry of Education has radically altered its own structure and operations. The ensuing changes may not have been fully appreciated, however, at either board or school level: the appropriate adaptations have apparently not been made. This has contributed much to the prevailing classroom climate of uncertainty and instability.

Throughout an earlier period, the Ministry imposed very tight curricular controls. Written curricula were explicit, detailed and relatively stable. Moreover,

the Ministry took a direct hand in support, consultation, and inspection of the classroom teachers. Thus a strong central bureaucracy exercised fairly direct regulation over content, materials, pedagogy, and standards for each grade in elementary schools throughout the Province.

Over the past ten years, the Ministry has brought about considerable decentralization, involving a new distribution of functions among the regional Ministry offices, the school boards, schools, and the teachers themselves. In theory, many of the prerogatives and tasks formerly associated with the Ministry devolved upon the boards, which had been strengthened and expanded through rapid regional consolidation. Progressively, the role of the Ministry was correspondingly redefined: a curricular guideline was now a statement of philosophy, aims, or behavioural outcomes rather than a detailed syllabus of content, sequence, or materials. Programme consultants, who had formerly provided immediate classroom aid by disseminating materials and tactics, were effectively phased out, with regional "curriculum services" personnel assuming a "role of policy delivery and regulation, rather than direct classroom back-up", as one Ministry official put it. In moves designed to differentiate policy formulation from practical help, the Ministry contracted its own role to that of broad policy design and regulation, assigning the tasks of curricular implementation as prime responsibilities for the new boards themselves. All the evidence from our community suggests that this was, indeed, a rational, well planned, and fully articulated process of change, much in sympathy with both community needs and the feelings of the teachers. Nevertheless, for a variety of reasons, the withdrawal of the Ministry from support areas has left something of a void which, while possibly temporary, still appears as a central problem for classroom teachers:

The Ministry has had no role... teachers are hardly aware of the Ministry. We haven't worried about them. We study the guidelines and say, "these are so

broad!" If you call that guidance to a school system....

The Ministry guidelines are no help! They're published to please everybody and his mother. They're so general they are not helpful... (they) only told me what children should learn, not how.

Ministry guidelines don't say a hell of a lot... would like to see the Board develop curricula. The Ministry materials are so loose, they're no guidelines at all.

P1/J1 (Ontario, 1975) are so general that you could get by the whole year without teaching anything substantial.

Such comments, which typify the attitudes of teachers in Albertown, reflect little appreciation of the structural and functional changes intended by the Ministry. They express, as well, the low-keyed resentment and antipathy felt by many teachers, who view the educational superstructure at Board and Ministry levels as failing to recognize and attend to their needs for direction and support. The gap between abstract policy - statements of philosophy or goals - and concrete, practical guides to the appropriate content and level of daily classroom work is uncomfortably wide for many teachers. In this regard, there is a real difference between the older teachers in the system and the many younger teachers recruited during rapid expansion. Experienced teachers and principals welcomed the new freedom; they possessed the confidence, background and judgment which permitted curricular development and adaptation without undue workload or risks. Many had already moved well away from "departmental" guidelines through gradual innovation. On the other hand, they recognized the strains imposed upon less secure and knowledgeable colleagues faced with the task of translating ideals into classroom activities:

The Ministry guidelines are not much use... not too different from the preamble to the courses twenty years ago. The problem is that they assume vast knowledge, experience and materials to turn their guidelines into a pragmatic programme.

Guidelines from the Ministry are so general that they are next to useless for teachers with limited experience... need more supporting materials with emphasis on topics and sequencing.

Newer teachers have drawn heavily on the older curricula, as modified by veteran teachers, on materials from other boards and on the work of in-school committees organized for each grade-level.

The Albertown boards have generated only a few curricula, for special subjects in particular grades. The actual impact of these documents, as of the county committee structures relating to curricula, has as yet been relatively slight. Likewise, the effectiveness and scope of board-level curricular consultant services were frequently questioned by the teachers:

I don't know whether the primary consultant system is working. I asked for help in August and the consultant came today (February)... didn't even know what grade this was!

We have supervisors for religion and music (Separate Board) but no math or English supervisor.... no curricular help!

Beset by the problems of reorganization, expansion and, more recently, financial constraint, the school boards in our community have not been able to provide the kinds of curricular development and support which would have been essential to effective innovation in an expanding system with many novice teachers. The results have been inconsistency and discontinuity in practice, amongst schools and grades, together with some anomie for both teachers and pupils.

The Enriched Curriculum

From the late fifties up to the present, the trend has been toward the addition of new subject areas, activities and extra-curricular options at the elementary level. At least three sorts of pressures may be discerned within this enrichment process.

First, a student-centred approach involves, of necessity, some reorientation of the curriculum from the interests of the adult community to the interests of the young learners. Not only the pupil's individual preferences, but his responsibility for choices within and among subjects assume new priorities. Two maxims of the era - that content must be "relevant" and that learning should be "fun" - expressed this shift of emphasis: the learner rather than the parent or society-at-large was now seen as the real consumer and arbiter of the school's services. The curriculum, it was felt, must engage the student in terms and concerns drawn directly from his own cultural experiences. Of course, this implied not only variation in curricula from school to school but flexibility for individuals or groups within subject areas. The "language experience" approach to literacy - much in vogue over the past decade - strongly reflects this sort of thinking. In Albertown, the schools saw the Ministry as supporting a high degree of curricular variation and flexibility, consistent with maximum student "relevance":

There's a swing back now on the part of the public and the teachers, but the Ministry has not accepted the swing, as evidenced by "The Formative Years" and HSl. The Ministry is still on that lack of curricula and core: each school is different; each school should have different curricula. Nonsense! There are more common elements in the student population than different elements (Ontario, 1976).

A second source of expansion beyond the traditional academic core has been the enhanced concern of the school with the total social development of the child. Expected now to provide a whole range of socially orienting and maturing experiences, the elementary school is compelled to seek a broader curricular base which emphasizes interpersonal or recreational skills and emotional as well as intellectual growth. This mandate reflects a search for socialization appropriate to increased social mobility, the continuing transfer of functions from kin or church to the school, and the parallel divorce of youth culture from the adult mainstream. All of these trends have created demands for new school experiences which are thought to be beyond those afforded by the conventional core of literacy and numeracy skill-building.

Finally, the enrichment process reflects a growing use of the school as a proselytizing agent (Spindler, 1963), and the accelerated efforts of a wide range of interest groups to influence or enter the curriculum.

All sorts of "worthy" outsiders, including safety organizations, humane societies, agricultural, labour, occupational, craft, philanthropic, conservationist, humanist, or cultural groups afford a steady source of visits, films, assemblies, trips, or activities, if they have not already contributed directly to some area of the regular curriculum. This enrichment had serious practical consequences for the school's effort to confer basic skills. Pressures upon scarce classroom time, resources and interest, for both pupils and teachers, became obvious constraints upon effective skill instruction. This was confirmed by our own observations and reported very frequently by the teachers.

The Hall-Dennis report was bad... the schools are not doing as good a job as when I started teaching. We're trying to do more with the same day. I can understand why X School and other private schools start up: they teach basics and then if they have time they

give the frills - films, trips, fairs, assemblies, more art, plays, etc.... We're cutting down on math and reading; we wanted these frills added but we took something away.

There are too many subject areas that we cover - that's why we miss out on the basics. If we would concentrate on skills (in primary grades) then in senior grades the students could get into social studies etc.

On rotary system there's almost no time for writing skills... three quarters of an hour to an hour for reading each day and the same for math. Language, grammar or spelling are sometimes set aside for math.... no formal instruction in writing.

If continuous progress is handled by a dedicated teacher with a lot of time, its OK. But the child must have time to learn and we must not lower our goals. The child who is a slow learner has too much to do... the year is almost over before they know their lock combination. There's too much to digest in the curriculum: art, science, literature.... If they made it half as much the children could really handle it.

Less evident but equally important has been the effect of enrichment upon specialization. A broader curricular base of subject and skill specialization, from shops through outdoor education to language options, has increased the use of rotational teaching arrangements in many schools. In turn, the narrower concerns and evaluative skills of discipline specialists have displaced the broader interests, intimate knowledge, and responsibility of the "home room" teacher. Moreover, considerable discontinuity of standards, expectation and usage has arisen because basic literacy and computational skills have become compartmentalized - specialties in a fragmented curriculum. This problem was most serious in the senior public schools, but was evident, as well, in the senior grades of some K-6 schools.

A less tangible but consequential outcome of enrichment may be its effect upon student attitudes. Our data do not really permit firm conclusions in this area, but they do suggest a link between the expanded, competitive curriculum, and student leanings away from the routine, drill and application required for mastery of basics, toward subject areas viewed as play or entertainment. This seems to be expressed more as a redirection of interest and involvement than as a pattern of choices, given the relatively limited options of the elementary curriculum.

In sum, enrichment has meant diversity at the expense of depth and weight in the conventional curricular core.

Teacher Preparation

Recent literature and research in the area of educational innovations (Fullan, Easterbrook and Biss, 1976) have emphasized the overriding importance of motivation, goal-sharing, and relevant skills on the part of the classroom teachers. While a bulk of the experienced teachers found themselves in sympathy with the general bent of reform, they were not prepared for the radical changes which were in many instances pressed upon them:

The pendulum has swung one direction in the Living and Learning bit... that bandwagon has been explored already. Initially it was in keeping with the motion of the teachers, but the motion was accelerated beyond what they were ready to accept (Hall, Dennis, 1976).

In a period of extraordinary expansion, the teachers' colleges sought to become effective agents of change by promoting the innovations described above. In the experience of virtually all our teachers, however, the enormous gap between the ideal pedagogy of the training institution and the stark realities of the classroom had served to discredit the colleges and to

throw the new teachers forcefully back upon the more conservative aid of their colleagues, the principal and the resources within their first school. Only one or two teachers reported that the college experience had been an important influence or help with regard to either their beliefs or their classroom practice. In fact, the overwhelming response was negative and resentful, as may be judged from the following representative comments:

I don't think teaching is anything like what they told us it would be.... They prepare you for the "average" child... they don't tell you there are kids who have problems!

I don't use anything that I learned in teachers' college: a total waste of time. Teacher education is pitiful.

They (teachers' college masters) made all the associate teachers out to be poor examples - told us to do our own thinking. Now that I'm one of those "others", I feel something is missing.

Although teachers commented favourably upon Ministry-sponsored summer courses in special subject areas, the in-service workshops and professional development days were not highly valued by most of our teachers:

That's the most frustrating part of my job! When I go to a workshop we have a big cross-section, but what works in one school doesn't work in another. I've gone to so many meetings where people are just getting on a methodology bandwagon. At one meeting we spent one and one-half hours deciding what kind of caster to put on a block-wagon!

I feel strongly about the educational system that time is spent on fancy meetings instead of on students.

I think the trend has been going on for some time... reorganizing materials, committees... too much bluffing done by administrators and teachers!

Thus, throughout the whole period of innovation, there appears to have been a great deal of uncertainty, confusion and improvisation at the critical level of classroom implementation. Both experienced and novice teachers found themselves not only unprepared but struggling to close a gap between their professional training and the emerging classroom realities. Older teachers were pressed into routines and practices which many found too radical; the novices, described by one teacher as "flaming idealists" were dismayed by their own conservative response to classroom difficulties for which they felt unprepared. Teacher training, then, remained at variance with everyday school practice, leaving many teachers feeling either dissatisfied with "the system", or inadequate to implement cherished ideals:

Teachers at this school have been here quite a few years. I came here as a new teacher ready to change the world: they said, "Whatever you learned in teachers' college, don't do here!" I'm stifled by a lack of security within this system!

The New Pedagogy

School reform called forth not only a new kind of curriculum, but novel teaching philosophies and styles as well. No comprehensive review of these innovations could be attempted here, but some idea of the direction of change will help explain problems which developed in basic skill instruction. Consistent with the new emphasis on a central and more active student role, uniform class work gave way to a great deal of small group activity, individual projects, or "contract" work in which personal student goal-setting figured importantly. Further, most of the new classroom styles

sought involvement and relevance by utilizing more of the oral and audio-visual media which had become so prominent in the pupils' extra-school environment. Content, assumed to be particularistic, was deliberately subordinated to process, assumed to be universally valid: the vogue for "discovery method" typified this concern. In like manner, technique was subordinated to expression or "creativity", as exemplified in "incidental learning" strategies. Within the framework of such general trends, a tremendous variety of methodological schools, styles, methods and procedures, developed. Some were generally applicable and others subject-specific. Experimentation and debate over such pedagogical variations became a preoccupation for teachers throughout this period of innovation, linked as they were to emerging claims of professional status and specialized technical competence.

Now, in retrospect, the new pedagogy appears flawed and is being viewed as itself a source of present learning difficulties.

Foremost among the problems which we observed was the diversity and discontinuity of instructional approaches, cited by teachers and pupils alike as a source of difficulties:

Principals, directors and consultants come in and say, "Are you comfortable with that method? O.K. Use it." But next year a new teacher comes in and uses a different method. What happens to the child's comfort? It's shot to hell! By grade two a child has had maybe four methods, and he can't put it together in spite of what the educators say.

In some schools, we observed as many as five or six divergent approaches to language study within primary grades alone: traditional primer and pre-primer work; language experience approach; phonics; key-word or rhyming method; various combinations of these streams; and special programmed materials such as DISTAR (DISTAR, undated). Each approach had attracted

ardent proponents and apologists. While teaching has always been a somewhat individualistic undertaking, reflecting personal as well as stylistic differences, variability has important consequences for school system continuity. At the moment, Albertain appears to exhibit almost a minimum of continuity and consistency in instruction. Consequently, pupils must make continual and somewhat costly adjustments.

The economy of the "discovery" method is now being questioned, as well, given that the educational experience is expected to compress, distill and transmit an enormous body of expanding technology. As one mathematics teacher noted:

I like the discovery method where possible, but I visited one school where they had spent two weeks trying to discover a method for square root.

Emphasis on discovery displaced, for a period, the traditional use of "drill", thought to be both far too content-oriented and much too uninteresting to the pupils. In mathematics, this frequently meant that the drill and memory work associated with "mental arithmetic" were abandoned: we observed a number of senior elementary and junior high school students who had never learned multiplication tables. One elementary principal reported to us that his own daughter had been told, in class, not to bother memorizing the multiplication tables. In sum, the routine drill associated with the mastery of basic computation almost vanished from the schools under the influence of the new pedagogy, and is only now returning.

At the same time, incidental learning became the favoured approach to instruction in writing skills. The techniques of grammar and spelling, it was argued, are only means toward expressive ends, and should therefore be introduced as facilitating skills, in a problem-solving context, rather than as isolated bodies of rules to be mastered by rote. The traditional argument, in aesthetics, that creativity and freedom in

expression are derived from mastery of technique rather than its absence, was ignored by this line of reasoning. As a consequence, a large part of all formal instruction in spelling, grammar and writing skills was eliminated:

Grammar was a swear word there for some time with regard to pedagogy.

Incidental teaching of these skills was ineffective, apparently, not only because it involved limited exposure and repetition, but because in most instances, under pressures of time and competitive interests, it simply failed to take place at all. As one novice teacher, a very recent product of the schools, commented:

Personally, I wasn't taught grammar when I came through the school system. I realize that I wish I had had it, and I really try with the kids.

A majority of teachers expressed dissatisfaction with the incidental learning approach, indicating a return to more traditional instruction and drill in writing skills. Yet some instructors are still very much caught up in the search for creativity and self-expression, deemphasizing the mechanics of composition. In one grade four class which we observed,, pupils engaged in "creative writing" were constantly questioning both the teacher and the researcher as to the spelling of various words. On inquiry, the pupils told us that they were "not allowed" to look up words in their dictionaries which lay adjacent and unused, although the same class had been observed previously in a lesson on the use of the dictionary. The teacher explained that she did not want concerns for spelling or grammar to "interfere" with the creative expression of the pupils. Such attitudes are increasingly rare in the schools, but by

all accounts they were indeed typical of the pedagogy of recent years, and characterize the instructional experience of many recent secondary school graduates.

Finally, teaching styles which have developed a heavy reliance upon oral communication and audio-visual input have tended to downplay both the quantity and the importance of written communication skills. In the view of the elementary teachers, however, this is the area which presents the greatest current deficiencies. As a result, there are some signs of a return to reliance upon written materials for both input and output:

Back in the "language experience" boom, grammar and spelling were bad words. I hope we're getting away from that. The teachers are getting back to the idea that work has to be read, otherwise its useless.

While pedagogical fashion may shift back to some heavier reliance upon drill, or formal work in writing skills, it is the new pattern of classroom media usage which is likely to have the most pervasive and enduring effect upon the acquisition of basic literacy skills.

Grouping and Continuous Progress

The notion that every child should progress through any skill or subject area by working from his own background, according to his own abilities, at his own optimum pace, continues to be appealing. The problems of organizing school, classroom, and group work activities to approximate this individualized progress, however, have not yet been effectively resolved.

One of the most evident adaptations to this philosophy was the virtual disappearance of failure as a sorting and sanctioning device. Instances of failure declined radically in all schools, and, in some, disappeared completely:

When I started here a student would not fail... impossible.... Marks would be doctored or he would be transferred to (secondary school).

Thank God it (failure) is more common now than it was; at one time no one was held back, regardless of performance.

Grade failure, as traditionally defined and used, fell into disfavour for at least three important reasons. First, having asserted that the total social and personal growth of the student is the goal of the school, rather than any narrower range of academic or organizational skills and work habits, the social costs of peer group dislocation were henceforth viewed as excessive. Secondly, it was argued that failure generated a negative self-concept for many students, setting in motion a self-fulfilling prophecy (Merton, 1968, Guskin and Guskin, 1970) leading to career patterns of failure and goal-abandonment. Finally, there emerged the belief that failure was no longer necessary, that the new responsibility of the student in independent goal-setting and the flexibility of the new classroom and programmed study materials would allow peers to work ahead at their own level within the same class. Careful ability-grouping within classes, or within some range of classes in an open-concept school, would ensure that each child could be challenged at his own level of ability and attainment.

The social goals of the no-failure practice seem to have been substantially realized: the spectre of the fourteen or fifteen year-old in grade six, with attendant drop-out patterns, has been largely removed. On the other hand, many teachers are now questioning the assumption that social promotion has a positive effect upon student self-concept:

Teachers are less willing to fail a child than in the past; then the problem starts snowballing. Pupils can't read the encyclopaedia or do research while the others can: their self-concept goes down. The student

knows he is reading things with fewer words, smaller words... faces this every day ... a subtle failure: perhaps worse than saying: "Repeat this grade".

A number of teachers expressed to us their perception that pupils promoted beyond their ability levels experienced daily embarrassments in the process. Further, they identified the ensuing negative self-esteem as an important source of behavioural and discipline problems.

Most serious, however, are the difficulties which have arisen in coping with the wide range of skills brought into each classroom by the social promotion policies. Initially, skill group arrangements were seen as the chief means by which continuous progress might be achieved. Teachers were pressed into this format with which many continued to feel uncomfortable:

When I came here, grouping and activity centres were "in". The Board and inspectors demanded this; people were forced into it. If you didn't do it you were asked why, and a consultant was sent in to help you set it up. This went on for four years. Our report cards are still set up for three groups.

When I first taught it was traditional. Then there was freedom, flexibility, emphasis on creativity rather than facts and the use of open area. We were forced into it, had to have the desks in a circle, etc. Now most people would go back to traditional methods. Kids do what they like, and don't learn that way. If they don't have to work they won't - they'll play. It has been realized that these methods don't work so well; the children don't learn so well.

Within the K-6 school, a great deal of information follows the student informally from grade to grade, through the principal as well as the significant informal exchanges in the staff room. Yet even here, where student ability levels are relatively well known

and some continuity in work can be provided, the classroom problems are substantial.

Group work demands, in effect, that the teacher handle three or more lessons simultaneously within the classroom, rationing instruction and assistance accordingly. Thus, a scheduled forty-five minute mathematics period may develop as five to ten minute lessons given to several different groups, with little opportunity to follow up on the crucial "seat-work" generated by new materials presented. Very often too, the teacher will simply direct the lesson to the "middle" group, while those pupils requiring remedial or enriched instruction are left to work independently with special mimeographed material, texts or programmed learning aids. In our observations, many such groups of two to four students were unsupervised in all but a broad disciplinary sense, and did not appear to be particularly diligent or productive. One respondent in her first year of teaching expressed concern for the weaker students:

We just don't have time for the very low group. I've been told: "concentrate on the middle group - the low group will always be poor." I had one kid in grade three reading a pre-primer.

Having abolished the old one-room schoolhouse through abrupt consolidation, we have now embraced policies which tend to make a one-room school out of every junior classroom in the Province.

The weaknesses of students promoted beyond their true skill levels are amplified by the interdependence of basic skill areas and special subject fields. Individualized and programmed language study materials such as the SRA package (Science Research Associates, 1973), widely used in our community, may permit a grade five student, for example, to work in reading or composition at a grade three level. Nevertheless, the science, health, or other subject materials encountered by the same student will generally demand a grade five level of vocabulary and comprehension and may present a

barrier to his optimum work within these subjects as well. Even the efforts of the teacher librarian to motivate extra-curricular reading may suffer:

Can I find reading material suitable to the interests of an eleven year old at the grade three reading level? No!

In sum, the teachers do not believe that they can cope adequately with the skill diversity created by the no-failure practices. Their observations, our own, and those of the students suggest that the resulting covert streaming may preclude effective upgrading of the lower skill groups within the regular classroom routine:

I had one student; I didn't think he should have been put into grade two, but he was pushed on into grades three and four. Now they don't know what to do with him. I don't know why they don't fail. I believe in telling a kid he is good, but not when he can't do the work.

I'm not sure we're doing the right thing pushing them through. For example, I have twins in grade six: one is reading at grade three level, the other at grade four. Both are at grade five level in math. The kids know the work is too hard for them. I'm not sure the senior public (grade seven) will cope with these individual differences.

In addition to the effect upon the students themselves, there have been important outcomes for the teachers and parents as well. Teacher workload is substantially increased: the strain of preparing for, and instructing several skill levels is compounded by insecurity and dissatisfaction in achievements. One experienced principal described the strains involved as teachers try to approach individualized programmes within their classroom:

Teachers can't handle a totally individual approach: they last two years and end up in hospital! Few teachers have enough knowledge and skill to handle all individually.

For the parents, continuous progress has apparently created a rising climate of expectation, and, in some instances, a false sense of security or satisfaction with the attainment of the child. In the relatively few remaining situations where children had been failed, parents occasionally opposed the principal, and had recourse to the trustees. Some even moved their children to other schools. Teachers told us that they felt intimidated by the parental involvement which a prospective failure might bring, and principals spoke of having to "prepare" parents for failure, months or even years in advance.

I'm really against "continuous progress." They arrive lost, and can't keep up. They don't get proper instruction even with special readers... self-image is destroyed. Better to fail than get pushed on.... We are told - instructed - by the Board to write positively on student reports. If I were a parent I would not understand; on continuous progress parents get false notions about the students - never realize how far behind their child is.

To summarize, then, the efforts to implement continuous progress have produced some favourable social outcomes, but have simultaneously created serious academic strains. Covert streaming through group work limits the time and energies directed toward weaker students, puts pressure upon teachers who are to some degree unprepared or unwilling, enhances basic skill deficiency as an achievement factor in special subject areas, and creates an illusion of attainment for many parents. Later, it will be argued that there are further important correlates of continuous progress in both declining performance standards and questionable student motivation.

As a group, the elementary teachers in our community were overwhelmingly in favour of a return to more traditional failure patterns. They view this as one possible tactic for controlling those problems created by radical skill diversity in their classrooms:

Thats' a wrong philosophy - not holding a kid back. Why put them on if they can't do the work? It doesn't hurt to hold a kid back.

One third of my class is on continuous progress - promoted for social reasons. I don't really like continuous progress: they would be better to repeat. Repetition and reenforcement would be better for learning.

Student Attitudes

You could go to any one of the thirty kids in my room, and if you put any pressure on them they would tell you to go to hell! They know they're going to pass and they're under-achievers because of it. The whole attitude in September seems to be, "Do what you can with me; if I fail you fail!" Work doesn't get done by a substantial proportion of the class... they can't be bothered. Work interferes with outside activities. They don't seem concerned with not getting work done. We are almost powerless. I spend a lot of time moralizing with kids about their obligation to work.

In this way, one grade six teacher described problems of motivation which were introduced by a great majority of teachers into our discussions of basic skills learning. "Student-centred" education has fostered a greater dependency upon pupil attitudes and responsibility, emphasizing intrinsic motivation while

the force of external sanctions has declined. The "ideal" children described by the philosophers and policy-makers of the sixties were naturally creative and curious; they responded spontaneously to the inner satisfactions of new experience and discovery, if given a sufficiently rich and supportive environment. What of the real children who fill the classrooms of Albertain? While some do approach the ideal mould, there are many who are apparently quite calculating, somewhat lazy, inclined to play rather than engage in hard work, and even skeptical of the value of those experiences and skills which the school is softly selling. In short, they reflect the attitudinal diversity of our adult community. Perhaps the most damaging outcomes of the new pedagogy have been the declining work commitment and the apathy linked, in the eyes of the teachers, to the removal of effective formal sanctions:

When we first started this no failure business, one kid in grade four refused to do the work. He just said: "You can't fail me anyway." I don't know where they pick this up.

It seems to me the children almost sense that they are going to the next grade, regardless of what they do or do not do. "Why put effort in if I'm going anyway?" When I went here, I worked because I did not want to fail and I saw friends fail.

First year here one kid - a smart kid, he could do the work - told me that there was nothing I could do to him to get him to do work. If I punished him his parents would take me to court.

In part, the teachers see this as an outcome of the very processes designed to engage and motivate pupils: as education has sought to become entertainment, it has evoked some of the detached, critical and non-committal responses typifying passive consumers rather than accountable participants:

In this class (twenty-six students) maybe five students take pride in neat and readable writing; a lot more don't seem to care. I don't think they care about grammar. Sometimes I get the feeling I'm supposed to be Bert and Ernie and Big Bird and entertain them, and somehow knowledge will end up in their heads without too much work or effort.

It is difficult to disengage attitudinal changes related to school structure and pedagogy from larger societal shifts in the work ethic. Yet from the observations of those inside the schools, recent school reforms seem to have had an independent, unanticipated and unfavourable impact upon student motivation.

Performance Standards

Educational reform brought into disfavour all those evaluation procedures which had aimed at imposing uniform performance standards. The stable "external" criteria of standardized testing or formal examinations were felt to be inappropriate in so far as they assumed regimented rather than individual goal-setting and progress, emphasized invidious or competitive over cooperative social norms, and appeared to promote negative self-concepts for disadvantaged performers. Some standards of performance have been retained in both the expectations of participants and the formal processes, but these appear to be extremely variable between different schools or teachers, unclear in many instances, and highly accommodating to student goal-setting.

Objective comparison of performance levels over time are made highly problematic by changes in curricula, student populations and extra-school factors, but the personal assessments of the majority of experienced teachers did point to some decline:

There's some teacher confusion as to what constitutes a "progressive" education. Some have

interpreted this to mean no direction. Under some teachers, children floated through without monitoring quality.

Goals are being lowered! I can recall teaching grammar... and the essays our grade eight students used to do! They don't have to reach that high in either English or math.

A while back they (secondary school teachers) felt that our school was very good! Later, they felt the calibre was lower, but that was because we stopped failing them.

If, in many instances, expected levels of achievement in basic skills are now unclear and weakly enforced, this has demonstrated the difficulty of translating ideals of intrinsic motivation into the practicality of mass education. Teachers in our schools were quite ready to recognize the important socializing and sanctioning impact of consistent, externally imposed criteria:

Basic skills are important to the students up to their definition of quality; that is, what they get by with. This is the issue: are we setting a reasonable standard for them, and are we letting them know that there can be variety in a class because of differences in ability?

Many students, we were told, worked toward the minimum levels of competency required by the formal grading and promotion system, levels which had been adjusted downward to accommodate the very weakest pupils in a broadened skill spectrum. For the teachers, this "underachievement" posed serious motivational problems related to the work attitudes described above.

SENIOR PUBLIC AND JUNIOR HIGH: THE CRITICAL TRANSITION

In Albertown, as in many communities throughout the Province, the primary system comprises junior elementary schools which terminate after grade six and involve a transfer either to the senior public school (grades seven and eight) or to the separate junior high school (grades seven through ten). From the accounts of both students and teachers, it was apparent that this is a particularly critical stage in the whole process of basic skill acquisition and consolidation:

As far as I am concerned seven and eight are the last opportunity to get basics: they're not stressed in secondary school.

Not only in terms of specific skill attainments but in terms of attitudes and motivation, early adolescence is viewed as a most crucial formative period. Interviews with our samples of both current secondary students and recent graduates identified grades seven and eight as the locale for the emergence of serious problems which frequently set the pattern for their secondary career. Teachers saw this as well:

Seven and eight are the crucial time... if they don't have an attitude for change now they probably won't have it. Those with a positive attitude will play the game, although they won't look past the curriculum to life goals. Those who don't have positive attitudes don't care. They identify with the anti-mark groups: "Hey scab! You got a high mark!".

Some kids give up on math completely: they get a failure feeling when they can't do basics... they feel bad about doing work out of grade three and five books, especially when a boy gets to be fifteen or sixteen. Several have told me they're being laughed at. They'll think of giving up quicker.

Nevertheless, although these grades are perhaps the most important in terms of basic skills, given the relative maturity of the students and the opportunities for review and consolidation afforded by the curricula, the very structure of these schools introduces important contrary pressures, which seriously diminish the effectiveness of instruction. First, there is the problem of isolation: in terms of the weak communication with both junior primary and secondary schools, student transfer frequently introduces real discontinuities. Continuous progress, as implemented in the junior school involves long-term diagnostic work, with somewhat individualized opportunities and performance expectations from year to year. This is particularly true for the weaker students. Information on skill deficiencies follows the pupil readily and informally through the primary grades, but seldom accompanies his move to the senior school, despite some written and interpersonal contacts:

There's limited contact with the feeder schools: I'd like to see more. There's little or no communication among the teachers either with the feeder school or the high schools. The communication gap is hurting the kids more than anyone.

Continuous progress is OK in junior school... that's a single environment where there's communication; but after transfer here there's no "continuous progress"... the student starts as a low grade seven not 'where he's at.'

The senior school frequently relies upon its own diagnostics, both standardized testing and teacher referral, in an effort to locate skill deficiencies. A large part of the student's two year stay, however, may be lost in locating problems and initiating any extra help or remedial attention, with little likelihood that this information will subsequently reach the secondary school. There, the assessment and sorting will begin once again:

Contact of the public school with the high school is nil; It goes back to the rift between teachers and their professional associations.

Thus, the isolation of the brief senior school experience may introduce discontinuity involving a loss of effective remedial opportunities at a most critical developmental phase. Beyond this, the very broad geographic base for such schools and the shortness of the pupil's stay tends to inhibit contact between school and community. Active parents' groups were noticeably absent in the senior schools. Generally, then, less intimate knowledge of the family and neighbourhood or scholastic and social background will be readily available to this school.

A second structural feature of the senior school which militates against a more effective treatment of basics is a division of responsibility and task specialization, modelled upon the secondary rather than the primary format. The rotary system can delay the discovery of individual student difficulties, dissipate the sense of responsibility and accountability for pupil performance, introduce grave inconsistency in demands as between classrooms and subjects, and aggravate time constraints:

Our staff are very committed - professional - there's a distribution of responsibility.

Informally, it's understood that the primary responsibility for monitoring basic skills is with the home room teacher.

Outside math or English classes students are given explicit evaluation of basic skills only in extreme cases.

In grade seven they couldn't write their own notes - had to copy them from the board. They'll be upset if they're asked to write on their own. They can't spell so they don't want to write. They're very concerned

about whether I take marks off for spelling in science: I should, but there are so many who can't spell anything! Of one hundred grade seven students I teach, thirty cannot read properly.

Math classes in grade eight are on rotary and the time limit is really bad. In other classes like science I don't think too much time is spent helping with difficulties in math, however, because there's too much time pressure. About thirty per cent of the students are not at grade eight level: they would not fit into regular grade nine classes.

Thus, it would appear that only the teacher directly involved in the instruction of English or mathematics - usually the "home room" teacher - accepts any real responsibility for monitoring achievement in the basic skills. Further, his task is enormously complicated by curtailment of contact with the students in a rotary system, time pressures from the enriched curriculum, and the inconsistency of standards in other classes and subject areas.

Although the commitment to "continuous progress" largely terminates with the junior primary grades, the wide range of acquired skills does not disappear; nor can the senior school cope effectively with disadvantaged youngsters in terms of formal remedial programmes. The separate school offered no such remedial help in grades seven and eight; the public school programme involved only three to five per cent of the pupils whereas teacher estimates of need ran as high as thirty or forty per cent!

In grade seven some are reading at level three or four; many at level five. Our remedial programme only picks up those at the very bottom end of the spread.

We gave tests to two of our grade sevens: they were reading at the 6.7 and 6.2 levels. Some were reading at university-level, some at 3.4 level: that's ten years in one class! It's difficult to cope with.

We've no remedial programme in grade seven. I have independent study for some and give extra help during seat-work time, but I'm not satisfied with what I'm doing remedially, and I'm also distressed that I'm holding back the top students.

Remedial classes should be earlier. Some teachers have kids who are behind in seven and eight....have no time to really help them and they're getting further behind.

There's an awareness, on the part of our staff, of a very basic need to remediate (sic) within the limits of the situation. We're more sensitive to this than elementary or high school. We're trying to equip them: we're not doing it very effectively for all kinds of reasons but we are trying and we are aware.

Remedial work, where it did exist, involved relatively short periods of time spent outside the regular class in individualized instruction. Those included were pupils whose difficulties must have been evident much earlier in the system, and who appeared likely to be transferred to the secondary school without any dramatic improvement in competencies. The secondary teachers are fully aware of this transfer process:

Forty per cent of our grade nine remedial students probably never passed English or Math in elementary school.

All in all, the collective commitment of the senior schools to the improvement of basic skills appeared weak in comparison with other social and organizational goals. Administration and staff of these schools are extremely conscious of the prevailing educational prestige system which allocates status according to the complexity and difficulty of the material taught. In turn, increased difficulty

generally involves greater degrees of specialization, longer formal training and more organizational support in terms of both preparatory time and physical teaching resources. One of the key goals of these senior schools has been to emulate the secondary structures, in diversification of curricula, teacher specialization and demands for complex physical plant and material resources. In each such school within which we worked, informants were at pains to emphasize both the highly "professional" and specialized nature of the staff, and the important resources not available at junior primary level, as well as their future needs in this regard. This was linked to the basic rationale for such schools, which emphasized the readiness of the adolescent for a more diversified social and curricular setting. In addition, there is the goal of preparatory socialization, providing a transition to the milieu of the secondary school. Whatever the strengths of this brief interlude in a senior school, from the narrow perspective of effectiveness in conferring or consolidating basic communication and computational skills there remain serious problems in continuity, consistency, and scale of effort.

AN ETHNIC MINORITY

Albertown, it will be recalled, included a substantial ethnic minority of southern European origin. Settlement has concentrated in one area of the city, where extensive use was made of the Roman Catholic schools. We had anticipated that this population might evidence more serious problems in skill acquisition, due to language difficulties as well as the potential for cultural gaps between home, neighbourhood and school. We subsequently found little support for these beliefs.

In particular classrooms, teachers did describe the language gap as a critical source of difficulty, not only in the development of English communication skills but in the attention to oral work and the use of regular curricular materials. Nevertheless, when we explored the problem more concretely, it turned out to

be extremely localized: a relatively small number of students in a few classrooms are the origin of most concerns. Moreover, the extent of the problem diminishes even further as those students move through the more senior grades. Later, in the secondary schools, we were uniformly advised that students from this ethnic group posed no special problem in terms of basic skills and were, in fact, generally diligent and well motivated. At no point in our enquiry did we encounter evidence contrary to such assertions. For a few students, then, there are some barriers to effective use of the school system, but the problems are not generalizable to the ethnic community as a whole. In general, this is an upwardly mobile group which takes full advantage of the opportunities offered through formal schooling. As an index of this, the group seems to be well represented at the post-secondary institutions in Albertown.

Three reasons for this successful adaptation are most probable. First, the immigration is not by any means entirely recent: this ethnic group has been populous in Albertown for several generations. New immigrants continue to arrive, but the numbers of school-aged children are relatively small. Moreover, assimilation is rapid, since it is accomplished not only through the larger host community but through the kin, friendship networks, and institutional structure of the established and well acculturated ethnic minority itself. Indeed, this thorough articulation of the ethnic group with the institutional structure of the larger community is a second explanation for the absence of serious problems. Although there is some heavy concentration by regions within the city, there is little of the "ghetto" to be seen. This group is extremely active, participating enthusiastically in municipal government, church, recreational, and voluntary associations, as well as the local media. There is an influential residue of experience in the successful use and influence of community structures. Reciprocally, other population segments in Albertown accord this group a high measure of esteem and acceptance.

Successful integration is characteristic of education as well, a third explanation for the absence of serious problems. Ethnic group membership on the Albertown Separate School Board is strong in terms of both numbers and influence. The parishes attached to the separate schools are staffed partially by priests of the same ethnic and linguistic origin: their closeness to both the school and the community provides an additional bridge of trust and communication. Schools in the area of concentrated settlement have drawn a substantial proportion of their staff from the same ethnic background, including a number of former students. Ties between the school and the community are thus unusually close. In the earlier grades, several schools stream those students whose exposures to English have been limited within the home, using special programmed learning materials with the aim of upgrading over a two or three year period. It would be difficult to sort out the effect of socio-economic and other variables from the ethnic fact for these slower classes, and this would require a very narrow application of scarce research resources. In our view, the adaptations of the school to the needs of the ethnic community were, in the main, successful: the scale of any continuing problems was not such as to warrant prominence in our developing scheme of interests and research strategies.

SUMMARY

We have attempted to locate the learning of basic skills within the framework of the elementary school. At first glance, that framework appears as the classroom, containing the teacher and pupils. However, our exploration has revealed a much more complicated reality: the teacher and the classroom are only fragments of a far more complex learning environment.

The student is a creature of the playground, the home, the family, the neighbourhood, the peer group, and the encircling mass media. Learning the basic skills is thus a precarious enterprise which may vary enormously from child to child. The family may

actively support the child; it may ignore his development, or it may frustrate his efforts. The home may provide an array of materials that facilitate learning; it may be barren of these, or it may be cluttered with distractions. The playground, peer group and neighbourhood may reenforce learning goals or, alternatively, denigrate the academic enterprise. Mass media may supplement and reenforce the kinds of learning toward which school programmes are directed, or they may smother the youngster with entertainment which exhausts his time and energy. Only exceptionally are external conditions completely favourable to the school's effort to develop basics. More often, it is an uphill struggle for the teachers.

While the background of the pupils provided one sort of insight into the problems of skill-learning, the background of the schools and the teachers proved to be equally consequential. Throughout the preceding decade, the elementary schools had been buffeted by the forces of expansion, as well as external changes in organization, curricula, pedagogy, and objectives. When we arrived on the scene in Alberttown, we visited an aftermath of uncertainty, conservative reaction, and some discouragement. The gains anticipated earlier had not materialized as expected, and much appeared to have been lost in the way of motivation, sanctions, performance standards, and work habits, as well as skill proficiencies. The enthusiasm with which the earlier system was dismantled had waned considerably amid the hardships of reconstruction.

"Continuous progress" has become a reality, but neither the full costs nor outcomes are visible within the elementary school itself: for these we shall have to explore the impact of wide skill disparities upon higher levels of education. While "continuous progress" remains the ideal, however, we were struck more by the many obvious discontinuities which characterize elementary schooling.

Historical discontinuities are, in part, the results of rapid expansion, massive recruitment and inadequate opportunities for the socialization of new teachers. Nevertheless, much of the firm ground of experience, upon which informal expectations of

diligence and performance levels formerly rested, has now slipped away.

Radical discontinuity in policy-making at higher levels, concerning goals, pedagogy, and the value of core curricula or external examinations has resulted in abrupt shifts and reversals which have left the teachers confused or even resentful.

At the same time, rapid decentralization followed by contrary efforts to relocate curricular authority at the Ministry level afford another impressive source of discontinuities.

Teacher training itself involves the confrontation of sharp discontinuities between the ideology and practice of the teachers' college and the practical compromise of the operating classroom.

Discontinuity in learning begins, for the pupil, with the experience of diverse and unrelated pedagogies in the basic skill areas, from year to year and from teacher to teacher, throughout the earliest grades.

Individual progress accentuates the interdependencies of basic skills and special subject areas. As the student progresses through the school, he may encounter troublesome discontinuities between his own basic skill levels and the demands of the grade-level materials in other subjects such as social studies or science.

In the more senior grades, the student must cope with further discontinuities as he discovers that the basic skills are valued and monitored very unevenly across the growing spectrum of discipline specialists who are now his teachers.

The pupil's moves to the senior school and to the secondary setting will be made hazardous through inadequate communication and through the social and professional distance which separates the various sectors. Such discontinuity is equally evident in the move from separate to public sectors.

Finally, there is a perplexing overall discontinuity between avowed recent aims (greater student interest, enjoyment, involvement, and responsibility) and admitted outcomes (greater apathy, detachment, unwillingness to work, and irresponsibility).

In sum, efforts to implement continuity for the learner have, in various ways, created or enhanced structured discontinuities about which revolve many of the difficulties in the learning of basic skills.

Chapter IV

The Secondary Sector

As we move, in this chapter, to a consideration of the secondary school, we turn from a setting in which basic skill instruction has been a central task, to one in which skills have traditionally been presumed as a basis for application and enrichment. Our analysis thus takes on a new dimension: the assessment of preparedness attained through earlier schooling. Preparedness, however, turns out to be a relative term, evoking questions of entry, curricular choice, streaming, performance standards, course content and matters of pedagogy. In such concerns, we try to discover how the secondary school has adapted not only to the familiar external pressures for growth and innovation, but to the capabilities and work habits of the new wave of students and the career aspirations of their teachers. In this process of adaptation, changes in the informal structure of the school appear to be at least as consequential as any formal changes in requirements or procedures. We push beyond the latter, then, to explore broad shifts in the climate of the school and the attitudes and values of students and teachers.

THE NEW FACE OF SECONDARY EDUCATION

The public doesn't understand the techniques of the high school, because the high school isn't the same place they went to! (English Department Head).

In order to appreciate the complexities of basic skill-learning at the secondary level, it is important to have some awareness of recent changes in the climate and organization of the high schools. Our account of these changes can be neither comprehensive nor systematic, but it may offer some insights as background to the analysis of our observations in Albertown.

A clear focus for many of the changes can be located in the phenomenon of rapid growth. Table III affords a concise overview of two decades of system expansion. Growth in the size of the secondary units is reflected in the differential between school and pupil increments over the same period. (The number of elementary units actually declined during the same period due to the consolidation of many small rural schools).

Growth has, of itself, precipitated a number of important structural changes. The large composite schools produced by the demographic bulge of the sixties, by consolidation and by increased specialization rather than replication of facilities, are complex and thoroughly bureaucratized structures. Students and staff must operate in an environment characterized increasingly by more formal, impersonal "secondary" relationships: the contrast with the neighbourhood primary school of yesteryear is a striking one. Promotion by subject, individual timetabling and the "credit" system of electives all tend to bring students into much wider but more superficial contact with their peers. Although friendship cliques develop from earlier school or community ties, and out of smaller specialized classes or shared recreational interests, the earlier overlap of peer and academic structures by "class" or "stream" has virtually vanished.

Growth has also produced a more diversified and extensive physical plant, within which the new service facilities and transit corridors serve important latent social and recreational purposes. Independent study facilities such as the new libraries bear little relation to earlier "study rooms" which frequently had the custodial character of the "detention hall". All in all, the school more closely resembles a campus

Table III**ONTARIO SCHOOL SYSTEM GROWTH 1955-1975****A. Public Secondary Schools**

	No. of Pupils	% Change	No. of Teachers	% Change	No. of Schools	% Change
1955	174,562		7,357		375	
1960	262,775	+50.5	11,478	+56.0	430	+14.7
1965	418,738	+59.4	21,659	+88.7	499	+16.1
1970	556,913	+33.0	33,693	+55.6	569	+14.0
1975	605,160	+ 8.7	34,826	+ 3.4	615	+ 8.1

B. Public Elementary Schools

	No. of Pupils	% Change	No. of Teachers	% Change	No. of Schools	% Change
1955	863,614		27,533		7,040	
1960	1,126,388	+30.4	36,533	+32.7	7,052	+ .2
1965	1,320,043	+17.2	44,967	+23.1	5,707	-19.1
1970	1,465,488	+11.0	59,307	+31.9	4,248	-25.6
1975	1,389,478	- 5.2	58,167	- 1.9	4,017	- 5.4

(Source: Ontario Ministry of Education,
"Education Statistics", 1975)

under one roof than the small, more rigid and less differentiated prototypes of decades past.

Demographic changes have had unexpected consequences. Increased retention of students has radically altered the tone of the school by raising the median age of the students. In many subtle ways, the secondary school has become a more adult environment and, at the same time, a more socially heterogeneous one; it is less dominated by upper middle class values and behavioural standards. Age and affluence have combined, moreover, to produce a much more independent and critical pupil clientele.

Teacher recruitment patterns have contributed, also, to the changes in secondary education. Rapid expansion lowered median teacher age as it raised that of the students. Moreover, the newer recruits reflected something of both the idealism and the "anti-authoritarian" trend of the sixties, as mediated by the new academic self-confidence and missionary zeal of the education faculties and teacher training institutions. Although the thrust of this reform ideology was blunted by the early practical experiences of most teachers, substantial pressure was gradually generated.

The reform philosophies established a priority of personal development goals over narrower academic skill objectives:

How much effort should be directed toward socialization as over against skills? For adolescents, the social ends are more important (Principal).

With new aims, the school moved to new criteria for the expansion of curricula, along experiential rather than content-assimilation lines, and to new processes of accreditation and academic selection. The increasing maturity and independence of students coincided with the egalitarian bent of a youthful staff to engender a much looser set of relationships within the school. The traditional and seemingly unending struggle to enforce rather precise deportment,

attendance and work norms was substantially relaxed as the teacher slid into the more comfortable role of the subject specialist, resource person, or counsellor. The routine of a day to day contest in which staff strained to affirm and enforce the structure of authority on which the teaching capability of the school was thought to rest, was abandoned to some extent with the identification of new student freedoms, and presumably, responsibilities.

Many of these changes are related to increased student retention, a major focus of educational policy and social concern for several decades. In Albertown, as in the Province and the country as a whole (see Table IV), the secondary schools had been successful in their efforts to recruit and retain whole new segments of the community's youth. In the process, the schools were themselves transformed.

To the outsider, the school will appear incredibly enriched, in the new wealth of facilities, special skills, instructional or recreational alternatives, and freedoms for staff and students. It may also strike one as impoverished: an institution which reflects the heterogeneity, uncertainty, and weakly consensual direction of the larger society, deprived of an historically strong commitment to a specific set of values and social goals.

Albertown's secondary schools represent much of the diversity to be found in the Province as a whole. Nevertheless, it should be noted that, from the comparative perspective of the regional Ministry officials, Albertown schools were seen as being somewhat toward the conservative and traditional end of the spectrum. If this is a valid assessment, it suggests that our data will be prone to understate rather than exaggerate the impact of structural and curricular innovation.

At the centre of the community, the oldest of Albertown's public secondary schools now serves a very heterogeneous population, in terms of linguistic, neighbourhood and educational backgrounds. The school itself has been enlarged over the years, to accommodate expanded technical and commercial offerings. Despite recent innovations in semestering, in extended subject

Table IVSCHOOL RETENTION PATTERNS FOR ONTARIO AND CANADA,
1960-1975

A. Grade 11 enrolment as a percentage of grade 2,
nine years earlier, adjusted for migration.

	1960-61	1965-66	1969-70	1970-71
Ontario	57.0	69.9	77.6	81.7
Canada	49.8	66.6	76.4	80.0

(Source: Statistics Canada, Education in Canada,
(1973) pg. 358)B. Grade 12 enrolment as a percentage of grade 2, ten
years earlier, adjusted for migration.

	1965-66	1969-70	1970-71	1973-74	1974-75
Ontario	59.0	67.6	71.4	66.0	67.1
Canada	50.5	62.8	69.8	70.8	71.5

(Source: Statistics Canada, Education in Canada,
(1973) pg. 361; (1975) pg. 149)

periods and in work-study arrangements with local business and industry, the collegiate retains a strong sense of traditions. Visible links with the many former pupils in Alberttown, and the presence of a number of senior staff who have continued for several decades within the school have helped to support this sense of tradition. In our single year cohort sample, the students from this inner-city school, however, had shown less commitment to a core of English and mathematics credits and were less likely to enter post-secondary studies, by contrast with other schools in the community. Table V provides this comparison of the Alberttown secondary schools by numbers of credits, with selective controls for subject area and present position of the respondents. While care must be taken in inference from such a single, incomplete sample, these patterns, if valid, would be consistent with the heterogeneity of the school's population base as revealed in census data. At the time of our research, this school had an enrolment of approximately fourteen hundred students, with some seventy-five teachers.

By contrast, more than two thousand students were in attendance at the largest of Alberttown's schools, which employed well over one hundred teachers. Built to accommodate the rapid expansion through fertility and migration, in the post-war decades, this large composite facility also serves a relatively wide mix of neighbourhoods, from suburban upper middle class to high density public housing. In addition, this sprawling complex handles some of the older city districts where Alberttown's ethnic minority is concentrated. Although the school is identified locally in terms of its extensive technical facilities, a very substantial proportion of graduates do continue to find post-secondary access.

The newest of Alberttown's composite schools is the most homogeneous in recruitment; aside from a small rural input, the area served is largely middle class. Moreover, it includes those areas surrounding Alberttown University, and thus draws disproportionately from faculty and student households. The presence of a "technical" school in the same area tends to siphon off local students who are less able, academically, and

Table V

COMPARISON OF ALBERTOWN SECONDARY SCHOOLS:
 MEAN . SECONDARY CREDITS FOR SELECTED AREAS AND
 SUB=POPULATIONS*

	Total Sec. School Credits	English Studies Credits	Mathematics		
			Post Sec. Group Only	Empl'd Group Only	Total Sample
Older Inner-City Collegiate	28.72	4.56	5.05	3.65	4.19
Large Suburban Composite	31.00	4.86	4.84	3.87	4.39
Newer Suburban Composite	31.25	4.74	5.08	3.95	4.57
Private Catholic School	31.00	4.65	5.39	4.61	4.90
"Technical" School	25.00	3.20	3.25	3.40	3.40

*Based on the Cohort Survey, 1975 N = 530

further contributes to the maintenance of an advantaged student population. The modern, almost luxuriously equipped facility housed just over fourteen hundred students and some seventy-six staff at the time of the study. (This was very similar to the enrolment of the inner-city school described earlier). Our cohort data confirmed local belief that this school was "post-secondary-oriented," with a strong emphasis on conventional curricular "core" subjects such as mathematics and English. Table VI illustrates this differential distribution of graduates and leavers (1975) from the Alberttown schools.

Two smaller secondary schools enhance the diversity of secondary opportunities in Alberttown: a private Roman Catholic school, and a "technical" school operated by the public board. The private school offers a traditional "academic" curriculum, with relatively few options, although a small number of commercial courses permits some concentration in this area for girls aiming at stenographic or secretarial work. With a very long history in the community, this institution emphasizes its traditions through continued attention to dress, deportment, the formation of Catholic commitment and morality, as well as the expectation of scholarship in conventional core subject areas. Both smallness (between five and six hundred students and some thirty staff) and self-selected recruitment foster a strong sense of elitism, identification and esprit de corps, despite financial difficulties and the absence of many facilities taken for granted by the well endowed public sector. Grades nine and ten within this school are operated by the separate school board; many students are thus pressed to transfer to the public secondary schools in grade eleven in the face of substantial private tuitions beginning with that grade. To some extent, this loss is offset by students who move in from the Catholic junior high schools. In general, the student body reflects a high ratio of girls to boys, and a heavy use of this school by Alberttown's large ethnic minority.

Like this Catholic school, the slightly smaller public "technical" or "vocational" school (approximately four hundred and fifty students with

just under forty staff) also has a strong sense of purpose and unique identity, shared by the staff and students. Modelled upon inner-city vocational schools in some of the Province's larger urban centres, this unit was designed to consolidate technical training and remedial academic work for pupils, from all areas of Albertown, who are deemed unable to cope with the demands of the normal composite school programme. By referral, the school recruits failing grade eight or grade seven students, as well as a smaller number of elementary graduates and transfers from the other secondary schools. Recently, a two year additional programme has made it possible for some students to proceed toward a graduation diploma. In general, all areas of curricula here may be viewed as remedial. Despite the stigma which has attached to the school from the start, student morale and achievement offer convincing evidence of the utility and success of this undertaking.

Though the modern secondary schools may present a somewhat new face, they must continue to cope with many old problems. Not the least of these is the continuing variability of home and neighbourhood influences, which may support or frustrate the efforts of the school in conferring and appreciating basic skills. Despite the growing importance of influences from media and peer group, and the adolescent exploration of significant new milieux, such as the workplace, students remain open to the whole range of socializing forces which preceded their first contacts with the elementary school. Where the elementary schools, however, mirror in a most immediate way the socio-economic and ethnic characteristics of a compact neighbourhood base, such differences between schools become differences within schools at the broader secondary level. Each of the secondary schools comprises, to a large degree, a heterogeneous population exhibiting wide variations in the supportive values, life-styles, and skills offered by family and neighbourhood groups. Visible to some extent in the covert "streams" of four and five year pupils, social background differences remain an important though elusive source of variability in skill acquisition within each of the schools described above.

Table VI

COMPARISON OF ALBERTOWN SECONDARY SCHOOLS:
DISTRIBUTION OF GRADUATES AND LEAVERS BY PRESENT
POSITION*

	Total	Employed						Tot Emp.
		A	Job B	Classification**			F	
			C	D	E			
Older	129	4	30	5	4	20	6	69
Inner-City								
Collegiate	100%	3.1	23.2	3.9	3.1	15.5	4.7	53.5
Large	169	6	17	5	1	24	4	57
Suburban								
Composite	100%	3.6	10.0	3.0	0.6	14.2	2.4	33.8
Newer	143	3	17	6	2	17	2	47
Suburban								
Composite	100%	2.1	11.9	4.2	1.4	11.9	1.4	32.9
Private	64	2	7	5	1	9	0	24
Catholic								
School	100%	3.1	10.9	7.8	1.6	14.1	0.0	37.5
"Technical"	25	1	9	2	0	1	0	13
School								
	100%	4.0	36.0	8.0	0.0	4.0	0.0	52.0
All	530	16	80	23	8	71	12	210
Schools								
Combined	100%	3.0	15.1	4.3	1.5	13.4	2.3	39.6

** Job Classification correspondance.

A - Textile Labour

D - Farm man., Elect.

B - Labour, Const.,
Mfg., Mach.

E - Cler., Steno.,
Tellers

C - Stock, Cash, Sales

F - Mgrs., Fore., Tech.

* Based on the Cohort Survey, 1975 N = 530

Post-Secondary			Other
-----			-----
Univ.	C.A.A.T.	Total Post-Sec.	
18	24	42	18
14.0	18.6	32.6	14.0
58	32	90	22
34.3	18.9	53.3	13.0
60	20	80	16
42.0	14.0	55.9	11.2
22	10	32	8
34.4	15.6	50.0	12.5
0	4	4	8
0.0	16.0	16.0	32.0
158	90	248	72
29.8	17.0	46.8	13.6

This has been a rather extended sketch of the secondary schools in Albertown, but we hope that it will give the reader some concrete feeling for the diversity of the settings within which we pursued our concern for the learning and application of the basic skills. Many weeks were spent in these schools, in interviewing, informal discussion, perusal of records, classroom observation, and occasional participation in school events. The analysis which follows is the product of those experiences.

COURSES, CHOICES AND STREAMS

Transition to Secondary School

In the view of the secondary school, basic skill deficiencies are largely rooted in the elementary experience, and may be readily observed in the incoming cohorts of grade nine pupils. Both teachers and administrators drew attention to variability in skills amongst feeder school populations and between years, dependent upon the cycles of emphasis in elementary pedagogy. Nevertheless, the overall assessment of skills was consistently negative, indicating a continuing gap between grade-level expectations and performance norms for a large group of new students:

We use the Nelson standardized test for grade nine - within this school only. About half are below level.

Many read at university speed, but comprehension is at the grade seven level. I agree with most of what the press and public are saying: the skills are not there. Thirty out of forty kids per class bothers me.

Indeed, such comments were substantiated by standardized testing data from two schools, where between one-third and one-half of all students were, on entry, below grade nine level in reading speed,

comprehension, or both. While estimates of writing skill were essentially more subjective, there was virtual consensus amongst teachers as to the deficit in this area. In the words of one technical department head:

If you give grade nine students a question sheet, most won't answer by starting with a capital and ending with a period. Math is pathetic! They've experimented too much with basics. My own kid is out to lunch in math: went through about four systems. We wouldn't have remedial programmes in grade nine if we were satisfied with the incoming students. We prefer the kids to have older type teachers in the elementary system - get a good grounding.

Students, as well, repeatedly articulated their own sense of weakness in the area of writing skills, linking this in part to the heavier demands upon literacy within the high school:

At primary school if you didn't know the answer the teacher gave it. Here, she says "It's there; find it yourself." The tests there were multiple choice - fill in the blanks; here they're essay type. I didn't know how to write an essay answer.

Such standardized testing as was carried out by the boards did support the teachers' contentions as to wide variability and specific areas of weakness. In general, such data were inadequately analyzed and disseminated from the board level, proving minimally useful to the schools themselves. School identity was frequently submerged in County norms. County levels of achievement were also difficult to interpret given that the test "norms" often involved very disparate populations tested as far as a decade past. Again, if the problems in skill-learning are provincial rather than local in genesis, then closer and more recent

"norms" would only have supported Albertown's relative position within the larger shifts. Board testing programmes involved the Canadian Tests of Basic Skills (grades one to nine); the Davis Reading Tests (Form 2A, grade eight; Form 1A, grade eleven); the "Albertown County" Mathematics Test (grades four, six, eight, nine); and the Bobbs-Merrill Arithmetic Achievement Test (grade three). In fact, the secondary schools paid little attention to the board-level tests, and each English department, mathematics department, or remedial teacher in the system carried out independent achievement and diagnostic testing as required. Such data, of course, lacked comparability from school to school and from year to year. We thus chose to rely much more heavily on the accounts of the teachers and students actually involved in the efforts to handle secondary curricular materials and tasks. In several schools and classes teachers shared with us their own test results, which informed and supported their accounts of particular skill deficiencies.

Problems in grade nine skill levels are linked, of course, to the philosophy and practice of "continuous progress" in the elementary school. Students who can demonstrate competence in some subjects may yet have important gaps in a basic skill area. Despite the existence of options for two or three levels of difficulty in most segments of the curriculum, the timetable and pedagogy at secondary level are not geared to accommodate the new heterogeneity of abilities:

Continuous progress affects the quality of student we get. We haven't got that system here and the kids are lost. Because of our distance from the elementary school we cannot afford to have a kid working at the grade five level.

The junction with high school is important. Unfortunately, we can't move part of the student from grade eight.

Responding to a lack of skills is not the only problem: identifying the strengths or weaknesses of incoming classes or individuals, as a basis for curricular adaptation or remedial attention, is made extremely difficult by the information gap which separates primary and secondary settings. Student records, now pared to a virtual minimum consisting of "hard" data on enrolment and performance, may offer little insight into a history of pupil difficulties, even where used.

If they've been pushed through, we would never know. We don't know the elementary background of the students: we look it up if there's a problem.

There's a great deal of ignorance on the part of the secondary school teachers about what's going on in elementary school: a great gulf between the two.

The elementary and secondary schools are different worlds... its the same old story. They will not associate with one another.

This lack of liaison and information flow is even more critical in relation to the separate school feeders, where contact with the public secondary schools is infrequent and strained. Public secondary personnel repeatedly offered the opinion that preparation in basics was less adequate in these schools, yet we found no evidence of important differences in curricula, pedagogy or standards. Rather, such misgivings appear to be another index of the absence of contact and confidence.

Most typically, the response of the secondary teachers constituted a recognition of new needs and a willingness to adapt instruction and performance standards. There remains however, some strong support for a return to more stringent entrance requirements and a wider use of failures in the senior elementary school:

We get people in here (grade nine) with a grade five or six reading level: there seems to be a loss of standards. Something should be done to hold back these people.

We're letting almost everyone in: we haven't kept standards.

In sum, the demonstrably wide variation in skill levels amongst incoming students is viewed as exceeding the adaptive capacity of the secondary curricular options. Moreover, the ensuing tasks of identifying deficiencies and implementing remedies are aggravated by a serious lack of continuity and communication with the elementary sector.

Core Subjects and Student Choices

One of the key issues, for the media as for many parents and teachers, has been the question of a core curriculum(1). The freedom of choice provided under HSl, it is urged, permits students to avoid the relatively demanding study of English language or mathematical skill while opting for "easier" credits. The recent reponse of the Ministry (Wells, October 6, 1976), in restoring core studies in English and mathematics to the end of grade ten, suggests that such arguments have been taken seriously. Are emergent skill levels linked more or less directly to the subject enrolment patterns? Our research indicated that curricular content, consistency of skill monitoring, motivation, performance standards, and extra-school factors are all more important in their effects upon skill acquisition. Moreover, the alleged decline of secondary enrolment in basics proved to be something of a myth within Albertown.

(1) For examples of media coverage of this issue see the Toronto Star (March 2, March 23, March 27, 1976) and The Globe and Mail (April 3, 1976).

Several schools had analyzed their enrolment patterns over past years, spanning the introduction of HS1. From these data, it was apparent that the ratio of English credits to total enrolment was experiencing a gradual, albeit small increase rather than any decline (eg. 106. in 1969 to 115. in 1976). Mathematics credits had apparently suffered a insignificantly small initial drop (eg. 106. in 1969 to 103. in 1971) remaining stable thereafter. By contrast, other subjects had fluctuated much more radically: second language studies, physical and health education, and history had experienced substantial decreases, while fields such as art, home economics, or technical areas had grown somewhat. Thus, while some gravitation away from traditional "academic" studies to more applied courses was indeed in evidence, English and mathematics were not only unaffected but remained the two highest enrolment areas in the entire curriculum! We could find no evidence that any substantial number of pupils were avoiding instruction in these two traditional areas; this situation was common to all the secondary schools in our community.

There were a number of evident reasons for the continuance of traditional enrolment patterns. Most important, students entering after September 1974 were told that the Ministry would require a minimum of four "English Studies" credits for graduation (Ontario, 1976). Students were not merely counselled to take an English credit in each year: the "option" was stated as a requirement by most schools, and was filled in, in advance, on the option sheet received by the pupil. Further, despite the absence of such Ministry requirements related to the Secondary School Graduation Diploma, mathematics was treated by all schools in a similar manner. Some schools stipulated written parental permission as a condition for any pupil electing to deviate from this dual core. Incoming students themselves viewed English and mathematics as firm requirements in virtually all cases, as did the teachers and school administrators:

We have a compulsory programme here: five subjects in grades nine and ten each. This minimizes decision-making considerably (Principal).

We don't have much problem in math, because its one of those skills society says he has to have; parents, staff and employers. The office won't let them drop it (Teacher).

I was not too good in math at elementary school, but I've taken math all four years. It was put on my option sheet every year, the same as English. It's a good thing because some kids might drop it (Grade 12 student).

Thus, while the local public has greeted the announcement of the new core of basics with considerable enthusiasm, there is little evidence that enrolment requirements alone will have any substantial impact upon present patterns of course selection or skill development in the schools of Albertown.

While course selection, then, suggests a more or less unbroken commitment to numeracy and literacy skills, content and options within the conventional study areas warrant careful examination. In mathematics, despite the addition of several applied options such as business mathematics, or occasional offerings in newer areas such as computer science, the courses reflect traditional content and emphases. As well, there has been a substantial upgrading of topics at senior levels over the past decade. As one mathematics department head noted:

The nature of the subject matter doesn't lend itself to a permissive approach. It's also very difficult to get approval for innovative courses, and we're limited by the text books on the market.

In English studies, the situation is somewhat different. While a sequence of core courses

emphasizing literature has been retained in most schools, new offerings in oral communication, theatre arts, media studies, and others, permit students to enrol in "English" courses without encountering the conventional demands for solid reading and writing skills:

The credit system is detrimental to the teaching of basics: it's poor unless we can stick to a basic core. The students take theatre arts, for example, instead of the core survey courses. (Teacher)

Even within the core offerings, emphases on the instruction and monitoring of writing skills has declined drastically in most cases. These changes will be discussed more fully, but it is important to note, at this point, that enrolment in courses can be an illusory and unreliable index to basic skill exposure.

A great deal of interest has been shown in the sheer number of core courses selected by students under HS1. In the eyes of the public, as of some educators and politicians, basic skill proficiencies are related directly to the amount of course work undertaken in English and mathematics. We made use of our surveyed cohort of 1974-5 secondary school leavers to probe this relationship in an elementary fashion (Table VII).

First, a simple glance at the distribution of mean credits in English and mathematics, by present location, confirms the continuing commitment of Albertown students to a core curriculum. On the average, those students leaving school for work had taken some four courses each in the two conventional skill areas. This group averages a total of twenty-seven credits, the requirement for secondary school graduation. We can assume, then, that it probably reflects a four year population which, by and large, carried both English and mathematics through each year of the programme. In like manner, the five year students, now in post-secondary institutions, averaged five courses each in English and mathematics. These means, however, are the outcome of considerable

Table VII

MEAN SECONDARY SCHOOL CREDITS BY SUBJECT AREA BY
PRESENT POSITION

Area of Credits	Population					
	Total Surveyed		Full-time Employment		Full-time Post-Secondary	
	(N = 523)		(N = 204)		(N = 245)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
English	4.5	1.4	4.2	1.3	4.9	1.3
Mathematics	4.4	1.7	3.8	1.5	5.0	1.6
Total S.S.	29.7	6.4	27.6	5.9	32.3	5.5

Table VIII

CORRELATION OF SECONDARY CREDITS WITH SELF-ASSESSMENT
OF SKILL ADEQUACY (1), FOR EMPLOYED AND POST-SECONDARY
GROUPS

	Total SS Credits** (N = 196)	English Credits (N = 203)	Mathematics Credits (N = 204)
Employed			
Writing Adequacy	- .13	- .12	- .14
Mathematics Adequacy	- .06	.04	- .18*
Reading Adequacy	.00	- .05	- .01
Post-Secondary	(N = 237)	(N = 245)	(N = 245)
Writing Adequacy	.00	- .07	.20*
Mathematics Adequacy	- .04	.13	- .23*
Reading Adequacy	- .03	- .15*	.07

(1) Low Adequacy Score = More Favourable Assessment

* Significant at the .01 level

** Total Secondary School Credits

variance within each of the groups and subject areas. How important is such variation in explaining differentials in skill adequacy?

Our original correlation matrix had reenforced the importance of controlling for the present position of the respondent. Here, paradoxically, those with most credits had appeared least adequate, due to the intervening effect of position. Students with more credits presumably attained post-secondary positions where demands were greater and self-assessment lower.

A first simple control was applied by preparing new matrices for those employed full-time and those attending the university or the College of Arts and Technology on a full-time basis (Table VIII).

Interest in these matrices centres precisely on the absence of any strong relationships. For these two important populations, our data yielded no evidence of any meaningful impact of the number of courses taken upon assessed proficiency, within either subject area. Mathematics showed the only consistent relationships, but even these were relatively weak. (The anomaly of an inverse relationship between writing skills and mathematics credits possibly reflects the orientation of many students emphasizing mathematics and "hard" sciences in their secondary and post-secondary programmes.) When subjected to more complete controls for present position, through analysis of variance and multiple classification analysis, the small apparent relationship of English credits to reading skills disappeared. Only the relation of mathematics skills to credits held up as significant for our total sample.

From this point, we pressed the analysis forward by disaggregating our population, to observe the effects for employment and post-secondary sectors separately. For those students now in employment, the number of secondary credits had no meaningful relationship to assessments of skill adequacy in reading or writing (in relation to English credits), or in mathematics (in relation to Mathematics credits). For the post-secondary population, the number of English credits again proved unrelated to adequacy in either reading or writing, when we controlled for programme of study. In mathematics, however, the number

of courses (credits) taken in secondary school continued to have a relatively stronger bearing upon assessed adequacy, under the same control for course of study. Data for the latter analysis are presented in Table IX.

To summarize, the data from our sample gave no evidence of any meaningful relationship between English credits and skill adequacy in either reading or writing. Mathematics did sustain such a direct relationship for post-secondary students only. These observations are much in accord with data obtained in the schools.

All our qualitative information suggested that the English curricula had so far departed from any "skill" orientation that the number of courses taken would prove a poor guide to competencies. Mathematics, on the other hand, had sustained somewhat more of a skill component in the continuing review and consolidation of basic numeracy. In any case, small differences in the number of courses taken at secondary level do not appear to be an important determinant of competencies, according to our present information, and cannot be taken as a prime target for upgrading policies.

It is important to note that the data on "preparedness", presented here and elsewhere in the study, measure adequacy rather than proficiency. The latter is, presumably, an objective quality susceptible to measurement in absolute rather than relative terms: it is the sort of variability in skills which standardized tests are designed to tap. By contrast, adequacy is always a proficiency relative to some situational demand. Adequacy is thus a relative concept: the same proficiencies may be adequate to one situation, yet inadequate to another which makes different demands upon the young person. We profess little interest in "absolute" levels of proficiency or achievement. Our mandate involved the exploration of "preparedness" for divergent early experiences in post-secondary and work settings. Accordingly, our primary concerns focussed on the match or discrepancy of skill demands and skill proficiencies in particular situations. The best source of such data appeared to be the incumbents themselves: self-assessment was thus

Table IX

MEAN SELF-ASSESSED ADEQUACY IN MATHEMATICAL SKILLS BY
NUMBER OF SECONDARY MATH CREDITS BY COURSE OF STUDY
(PROGRAMME) FOR A POST-SECONDARY SAMPLE (N = 238)

Analysis of Variance	F Ratio	Degrees of Freedom	Significance of F Ratio
Joint Effect	1.988	22	.008
Math Credits	2.500	8	.013
Course of Study	1.507	14	.112

Multiple Classification
Analysis

(Grand Mean = 5.15)

No. of Credits	N	Deviation	Adjusted Deviation
1	2	-3.15	-3.02
2	13	1.93	1.76
3	20	1.15	1.18
4	69	.84	1.19
5	34	- .38	- .13
6	54	- .24	- .35
7	36	-1.31	-1.95
8	6	-2.65	-2.79
9	4	-2.65	-3.12
N = 238		ETA = .29	BETA = .35

Table IX (Continued)

Multiple Classification
Analysis (cont'd)

Post-Secondary Programme	N	Deviation	Adjusted Deviation
B.A.	71	- .10	- .04
B.Sc.	32	- .58	.12
Phys. Ed.	8	- .52	.09
Agriculture	8	-2.77	-1.64
Engineering	12	- .06	1.86
Land Archit.	1	-1.15	-1.02
B. Commerce	4	5.10	6.25
Agric. Diploma	2	-1.65	-1.26
Material Manag.	5	.25	- .21
Nursing	28	1.64	.48
Secretarial	7	-1.00	-1.98
Other Univ.	12	- .31	.32
Private Tech. Bus.	3	-2.48	-1.60
Trade School	1	2.85	1.67
Other CAAT	44	.13	- .71

N = 238

ETA = .30 BETA = .29

Multiple R = .40

Multiple R SQRD = .16

employed in our cohort questionnaire survey. Of course, our qualitative data provided a check on the validity of such self-report in the interviews with post-secondary faculty and employers, as well as the depth interviews with a sub-sample of those responding to the questionnaire (see Appendices A and B.).

For a small group of students, the problem is not that of failing to tackle "tough" courses building basic skills, but of reaching beyond their ability levels. This, in turn, reflects one of the major weaknesses of the school population in coping with the new freedom under HSl: the recurrence of poorly informed and inappropriate curricular choices. Old inequities resurface for youngsters whose parents may lack either knowledge and experience of the school system, or a willingness to involve themselves in the decision-making. As well, the academic prejudices and projected aspirations of middle class parents may press their offspring into courses which exceed the student's capabilities.

A lot of kids have chosen badly regarding courses to take in secondary schools. The child suffers from the parents' conception of the kid's ability and what they want the kid to be. The idea is that I can "fix up his reading". It's an unrealistic picture of what reading is.

The problem is kids who aren't in the level of course they should be in. You hate to see a kid go through a whole course when you know in three weeks that he can't make it.

The private secondary school listed a basic level (remedial) English course for several years. Due to the strongly academic orientation of its population, no students enrolled, despite evidence that this would have been the most appropriate choice for some.

The counselling departments clearly have a critical role here. While initial choices are made in grade eight, largely with the help of the home-room

teacher and senior school principal, crucial decisions made later, in the secondary school, can involve counselling resources. In most of the schools, counselling has rebounded from the personal problem-counselling preoccupation of the late sixties to a renewed interest in educational and vocational career guidance. While the two are not always separable, there is a definite shift in emphasis responding to the demand for services created by HSI, the growing complexity and declining appeal of post-secondary opportunities, and the uncertainties of the job market.

In a number of ways, the effectiveness of the counsellors is held to minimum. Vocational guidance has virtually vanished as a scheduled class period of instruction or discussion, and individual students are seen in most schools only through self-referral or the request of another teacher, not infrequently for behavioural reasons. With student enrolments characteristically between one and two thousand pupils, much school career-planning remains independent and unaided. Our student interviews suggest that neither parental nor formal school counselling figure importantly for a surprisingly large number of pupils in the lower grades, where the influence of peers and, particularly, older siblings is paramount.

A minority of counsellors cling to the "anti-establishment", student confidant role popularized in the revolutionary sixties. Their belief in the professional character and effectiveness of their "non-directive" stance was very much at odds with the expectations of the students, the bulk of whom emphasized a need for stronger and more responsible direction. Students were surprisingly candid in admitting their own lack of career-planning their self-assessed immaturity, and their willingness to make choices based on short-term convenience or ease of success. Nevertheless, a laissez-faire tradition of guidance persists, and sets the tone for at least one school in the community:

Our counselling is non-directive; we have no values here! My philosophy is that departments have forced things on students. Required courses are expressions of vested subject and department interests.

Under the current subject-promotion system, it is not merely the choice of basic curricular offerings which becomes problematic: the coordination with, and quality of preparation for other studies requiring mathematical, reading, or writing skills is equally crucial:

We need prerequisites and we're moving toward a more structured programme. Kids want to know where they stand, although in theory they like the supposed freedom. For example, a student can take introductory drafting and go directly into a grade eleven major in grade ten, without grade eleven math and science. Standards have dropped down because of this.

The problem is, you can get a student in grade thirteen biology who hasn't had science since grade ten. You can't force students to take courses. There are no "prerequisites": we have them but they're not approved by the Ministry.

We have prerequisites: we "strongly advise."

The open curriculum presumes, unrealistically, either the presence of high level basic skill competencies upon entry, or a far heavier reliance upon in-school subject-counselling than that which is now in evidence. Technical, commercial and senior level science teachers, in particular, were most critical of the weaknesses in basic computational skills which affected performance standards and necessitated the reteaching of these basics. In a similar way, problems in reading comprehension and written expression hamper studies in areas such as history:

The demise of classics and history is one of the saddest things in education. To have seminars in history without having read any history is pointless. To have kids write a short story - even a sentence - without knowing what it is, is pointless.

Thus, the content, workload and performance standards of many other subject areas hinge upon the appropriate selection and timing of preparatory courses which can review and consolidate basic skills.

Covert Streams

The open curriculum of HSl, with subject-promotion and few restrictions upon course selection, was designed to eliminate the earlier pronounced streaming and its accompanying prestige stratification of students, teachers and schools. In the official view of the Ministry and the school administrators, this is precisely what has happened. As one principal put it:

There's a mixture of students by courses: no streaming! Neither students nor teachers think of four or five year students. Social streaming is gone.

Despite such reassurances, it became evident early in our field work that streaming remains very much a reality for both teachers and students. All spoke of "four" and "five" year students or classes, and teachers readily admitted the importance of these streams in the thinking of the school:

We've never broken down the snob system - four and five year - in the school. Administrators say we have, but it's not true.

We still think of students as four and five year: classes here are divided in three groups in the first

weeks... definite five years, ordinary students and four year plodders.

The social stigma of the four year or tech student is reduced... no social barriers... but there is some identification of streams: for example, some kids doing auto mechanics as over against the grade thirteen calculus class, where the bulk are university-oriented.

Although many students do include both "general" and "advanced" level courses in their programmes, there is a tendency amongst pupils to identify themselves, relatively early, in terms of their post-secondary expectations, and to generate a package of credits predominantly at one level. This tendency is enhanced by the informal system of 'prerequisites' urged upon the students in each of the schools:

University level students tend to take all advanced level courses. I think of general level studies as non-university preparation.

We definitely do stream: no teacher, parent or pupil has been able to put that apart. Our intent is to stream by subject skills and we're seeing it happen, but we still have the bulk of our students taking a "package" and if a student wishes to be an advanced student he takes all his courses at the advanced level, and vice-versa. The staff have not broken down old attitudes to streaming, and the newer teachers are most conservative in this regard.

The streaming is a fact of considerable importance to understanding both differentials in skill attainment and the whole climate within the secondary school. To the extent that the present streaming arises largely through self-selection, abetted by peers and parents, it is first of all a reflection of attitudinal, motivational and cultural differences. As might be expected, these are for the most part congruent with

prior academic achievement. The striking differences in the streams, then, are in terms of work habits and definitions of the school situation, differences which are at least as consequential as any disparity in abilities. Teachers perceive the differences in precisely these terms, as comments from principals, teachers and department heads indicate:

They've been pretty well streamed by the time they get here, but the four and five students differ predominantly in work habits. There are some differences in... ability, but its mostly attitudes to school.

The five phase (year) studies are excellent in basic skills; in the four year phase, motivation is a problem.

I teach the five with the assumption that all are university bound: the four year course is different - I can't see any of these students going on to University. With the five year there are high standards, with the four year, no: many are just putting in time. The five year are concerned with the quality of work; the four year just do work to have have something on paper to appease if not please the teacher.

The five year are middle class kids, encouraged to go to school and university, intrinsically motivated to study. The general level four year have social reasons for not performing. A lot are holding half-time jobs... making one hundred dollars a week in grade ten. It's foolhardy to try to motivate them academically: their goals are extrinsic, materialistic.

In so far as the four year students are concerned, the perception of the educators, with which we concur, is that weaker achievement reflects sub-cultural values inimical to the school's demand for conventional academic proficiencies. This group, therefore, is not

likely to prove responsive to curricular or pedagogical change in the area of basics, unless the problems of commitment and motivation can also be addressed effectively.

In addition to a covert streaming within the larger composite schools, there exists a more obvious form of streaming between schools. Although there is little to differentiate two of the larger schools, each of which draws from a heterogeneous socio-economic base, one newer school located near the university in a predominantly upper middle class setting has the reputation of being oriented toward post-secondary preparation. This is actually reflected in a higher proportion of grade thirteen credits as contrasted with the other schools, but the differences are slight.

Equally important are the two schools which stand apart in serving special populations. A private Catholic secondary school offers a traditional academic core and some few commercial options combined with the emphasis on discipline, dress and deportment which are traditional in such a setting. Staff and pupils pride themselves upon being an "academic" school of high standards, with more than fifty per cent of all graduates entering post-secondary institutions. Although the Board of Governors and staff see the religious ends of the school as paramount, pupils and parents are generally much more interested in the small size, reputed high standards, discipline, or prevalent sense of elitism. One student who radically de-emphasized his religious motivation explained:

Students here are smarter than at other schools. They're a lot stricter, too: they have few dollars or facilities yet they turn out better students. A sixty-five here is worth an eighty-five at other places. It's a basic school... friendlier, teachers more concerned with students. Everyone knows everyone else: you don't get lost in the shuffle.

At the other extreme, although similar in size, sense of mission, and esprit de corps, is the

"technical" school which draws, on referral, from all elementary feeders in the community. Until recently, this school offered only a two year programme, accommodating failing, weak or over-age students from grades seven or eight. Although the school is of extremely high quality in terms of facilities and services offered, staff and students have had to struggle against the implicit streaming stigma:

I don't agree with the integrated high school: students would not get the same attention or concern they get here. Most who teach here are here because they want to be. Some kids say they have been threatened in coming here... the "dummy school".... It's hard to break down, and hard on the kids.

Many parents are still reluctant to see their offspring transferred to this school, although understanding and recognition are growing from year to year.

In sum, there remains some degree of streaming both within and between schools, delineating populations amongst which the background, performance standards, instructional goals and career utility of basic skills differ considerably. Any considerations of adequacy in basic skill instruction must take specific account of these divergent groups.

ASSESSMENTS OF PREPAREDNESS

We have seen that the secondary school considers incoming students as unevenly and often inadequately prepared in basics. Before examining the ways in which these schools cope with and attempt to remedy deficiencies, it will be useful to have some larger and more detailed account of skill problems encountered throughout the secondary setting, through to the end of grade thirteen.

At all grade-levels, basic computational capabilities were criticized very slightly by

comparison with communication skills. Little continuity exists between the abstract, theoretical bent of the secondary mathematics core curriculum and the demands of other subject areas. Most courses in arts, communications or social sciences simply do not invoke such skills. The only strong criticism came from teachers in science, business or shop areas, largely in relation to the general (four year) level:

In grades eleven and twelve I like to bring in engineering ideas and formulae: all but twenty-five per cent are lost. I have to explain the area and circumference of a circle. How can I teach them? I have one kid in a senior class who can't multiply!

Even in these subject areas, many potential gaps are remedied by the numerous options in technical or business mathematics which afford some continuing review of basics. The criticisms of the mathematics teachers themselves centre more about the appropriateness of course choices than any underlying skill gaps, although they do emphasize the need for recurrent drill. "We have to drill to retain basics, especially in the four level courses." One teacher linked his problems with streaming in this way:

The problem is parents... still tell kids "You should take math." There are forty per cent in the five year classes who should never go near an "advanced" course... no interest in form or theory. Some should not take math at the four level.

Where basic numeracy skills hardly constituted a problem-focus in the secondary school, communication skills seemed to be a source of difficulty in all quarters. Virtually all other subject areas have some dependency upon reading or writing abilities. Despite emergent tactics for loosening this dependence, dissatisfaction was thus present in most departments and levels.

For some teachers, the difficulty appeared simply as a resistance to reading, an unwillingness to invest the time in course materials. While some teachers were very uncertain as to the amount of reading done with texts or other required materials, all were forced to confront the problem squarely when providing written instructions, whether in shops, on exams, or for projects.

Hardest thing is to get people to read materials: they just won't read instructions, for example.

When I give written instructions to problems, so many cannot read that they have to be interpreted orally.

We get some kids who manage very well; also an awful lot who cannot write and cannot manage instructions. In the four level programme, a student who can understand instructions is unusual.

Although motivation enters into this problem, skill deficiencies are also clearly at stake. Students made frequent reference to reading difficulties in their discussions with us, as exemplified by this comment on the hazards of reading aloud (from a grade twelve student):

Many kids in my class have trouble reading. They don't like to do it in front of the class... feel ashamed.

If reading is inadequate, in many instances, for conventional curricular tasks, writing skills are nevertheless the major source of difficulties; on this there was near unanimity:

The inability to write is evident ... pathetic! Spelling, grammar and composition are weak.

One guidance counsellor described his experience with self-referred students:

I get a whole lot of kids in here who are in difficulty writing "major" papers and essays. They get upset because they are unable to cope. They don't have the skills and we don't teach them the process.

By contrast, oral communication skills were most often seen as more than adequate:

One of the better situations now is oral expression; but to put it on paper, on the average it's not very good. Some of them can't put down ten sentences and get a point across. I guess that most teachers would comment on poor grammar and spelling, but today no one would penalize. Before, we used to refuse to mark such assignments: if they were poorly spelled or written we would hand them back. Today we would have to hand them all back - almost!

Kids speak well and express themselves well orally, but that's not necessarily the case when it comes to writing.

In summary, oral communication skills were viewed as fully adequate, reading as a moderately serious area of deficiency compounded by motivational barriers, and writing skill as an area of severe and widespread shortcoming. Some evidence of weakness in computational skills was apparent, particularly upon entry and for the general level student, but such gaps had only minor repercussions throughout a diversified curriculum.

THE TEACHING OF BASICS

Communication skills, particularly writing, have already been identified as a focus of dissatisfaction: some special effort to appreciate the nature and problems of English instruction are thus warranted.

Teaching Communication Skills

It is important to recall, first, that English studies became a point of departure and innovation for many of the educational reforms of the sixties. The study of English gradually came to be seen as coextensive with the study of culture, the major aim being that of augmenting the student's range of experience, sensitivity, and facility of critical response.

The Dartmouth Conference of 1966 provided an historic and influential forum for the articulation of emerging goals in the teaching of English. Pedagogical literature emerging after these meetings displays a shift in emphasis from written to oral work, and from skill goals to experiential objectives related to literature studies.

It is not absolutely essential that (citizens) be able to write well, it is desirable that they be able to speak well, and certainly important that they be able to read and listen well. One way of sizing up the English curriculum . . . is to ask how well it is serving this basic purpose, which no other subject attends to directly. Another way is to ask how well designed it is to instill a respect for, and to develop powers of discrimination in, the civilized human values that democracy attempts to make available to all its citizens (Muller, 1967).

The reasons for teaching literature are many To me the emphasis in teaching literature in the Dartmouth report is essentially humanistic - that is,

an intense inter-relationship between life itself and the literature reflecting life (Pooley, 1971).

If an interest in literature is to inform and modify our encounter with life itself, the teacher must bring into a vivid relationship life as it is enacted and life as it is represented. . . . We look to literature to bring order and control to our own world, and perhaps to offer an encounter with difficult areas of experience without exacting from us the full price (Dixon, 1971).

The English child, in fact, acquires far the greater part of his mastery of the English language outside English lessons, so that it would be wholly misleading to think of English teaching as concerned with implanting in him a hitherto non-existent skill or congeries of skills. No, the true task of English teaching is to help children to refine, polish, raise to a higher level of sensitivity, effectiveness and precision a language which they already possess in a highly developed form The main business of the English teacher is not instruction in any direct sense, nor even teaching in the sense which may be applicable in some other subjects. . . it is important that the teacher should understand his pupils in depth, sympathize with their needs and aspirations, and be perceptively aware of their individual rhythms of growth and development (Whitehead, 1968).

English departments were among those which tried hardest to cast off traditions of "rote" and "irrelevance", reliance upon formal examinations or routinized grading procedures, and a hierarchy of values dominated by post-secondary emphases. Such reform interests were expressed, eventually, in a proliferation of new courses exhibiting little concern with the appreciation and mastery of language in a technical sense. As in the elementary school, Ministry policies were supportive, if not decisive, in virtually eliminating all formal instruction in spelling, grammar and composition:

In the early sixties inspectors said "Don't teach grammar as a subject in the high school: incidental learning only." In this area we are still being told this. For example, a grammar text by (name) was being used by one teacher; the superintendant came in, saw the teacher using the book, and said "This is wrong!"

Some years ago an inspector came in and found (name) doing grammar with the grade thirteens: she got proper shit, but she told him she was working with them where they were at. Even in grade three they play down grammar and talk about creativity.

The worst thing that's happened in education is the idea that grammar stifles creativity. When I came here, the edict came from the Ministry that we couldn't ask an examination question in grammar; it had to be taught "incidentally". The best you could do was say "That's a sentence fragment," and hope the kid could take it from there. It's the source of the problems at university. In general, standards have been lowered; you tend to adjust to the group in marking.

At the time of our inquiry, teachers still perceived these emphases upon personal expansion through literature and the subordination of technical concerns for language usage as the bent of Ministry policy. Of course, the colleges of education and graduate education faculties such as The Ontario Institute for Studies in Education also played a major ideological role in the reorientation of English studies.

What sort of curriculum grew out of these philosophical and policy shifts?

Some see English largely as a tool for getting at sociological problems... feel this is more important than emphasizing literary qualities. We also have emphasis on the media in some course options.

In these words, an experienced teacher of English characterized some of the trends which transformed English classes into a forum for the exploration of social and cultural issues. Unhampered by the rigour of philosophical or social scientific discipline, such classes frequently developed as exchanges of pure opinion and sentiment. While oral expression, interactional skills, and self-confidence may indeed have been cultivated in some of these new courses, little in the way of reading or writing was demanded, in many cases. The belief of parents that youngsters enrolled in "English" courses were learning to read and write more skillfully was frequently unfounded. Even where literature remained as the focus of study, the approach was often content- or idea-oriented, leading back to social, moral, economic, or political issues rather to an enhanced appreciation of style or structure.

One thing the Ministry could do for us: change the title of courses. "English" means literature, human relations skills, etc. The kid is not learning language skills.

We're retreating from the idealistic position ... the assumption that kids learn to read and write in elementary school. The high school English programme has become essentially a literature programme.

The English Department has not perceived a problem, or defines it as not their task. Our programme is literature- and idea-oriented. The Department met a few weeks ago and agreed on the existence of a problem, but did not agree on any action.

Confirmatory reports came from the students themselves. One grade thirteen girl described her experiences in English in this way:

In grade twelve I took English; it was primarily literature. All we did was read and discuss... content discussion. Some time was spent on different techniques of writing but only maybe once in each semester (four months) did we spend any time on grammar or spelling.

This "literary" emphasis elicited strong criticism from technical and commercial teachers who perceived their students as bound, generally, for the work world rather than post-secondary institutions. Business and commercial teachers tended to build drill in basic skills such as spelling, as well as a certain amount of remedial grammar, into practical courses such as typing. A few general level courses were located within the English studies programme aimed at a review of practical skills such as letter-writing, for the four year students. Yet these isolated courses did not afford even the kind of continuing review and back-up found in the mathematics offerings for technical or business students. The technical head in a large composite school reviewed the situation in these terms:

Math and English from the academic side are a preparation for post-secondary education ... not practical. Teachers are so ingrained with the idea - elitism - of teaching for university-bound students. Education means everyone reads Shakespeare: but for eight weeks? It's not practical enough. For students going to work, they need review of basics: reading and following instructions. There are two worlds here between the academic and the technical. I don't understand the stress on literature in English.

Of course, the formal rationales of the English departments continued to articulate a need for the development of writing skills. Moreover, the incidental learning approach, fusing the technical study of language skill to an appreciation of literature, made concrete assessments of the extent of

instruction or practice most difficult. Nevertheless, the reports from our cohort of school-leavers, as well as from students currently in the schools made it clear that, in fact, such instruction had either ceased or had been curtailed substantially:

They do grammar if they have time for it; but they've always done less than they said they would do (grade thirteen student).

Years ago composition was downgraded supposed to be taught in the context of literature; but after a while we all admitted that it was not happening (Teacher of English).

The real reasons for acquiescence in this withdrawal from formal instruction in writing skills rests perhaps as much in the attitudes of teachers and pupils as in any logic of policy or pedagogical research. Alike, teachers and pupils find the task uncomfortable and unpleasant. For the students, such studies are complex, time-consuming and, above all, unrelated to the easy and uncritical world of communication which the youngster enjoys outside English classes. He cannot readily translate his experiences of "parts of speech", "synonyms", "comma-splices", or "subordinate clauses" into the reality of his immediate oral or media environment. As well, there is a tendency to view such work as a characteristic component of the primary school curriculum, and, therefore, as childish or repetitive when undertaken in secondary school. In so far as secondary work is perforce reoriented toward review rather than enhancement of skills, such views are strengthened:

Students see basic skills as a drag and a bore: it needs to be done in elementary school (Teacher).

Interest in grammar is low: no one is interested in it. We had a lot of formal grammar in grade ten, but it wasn't taught properly and I was turned off grammar. In grade ten no one paid attention, so the teacher dropped it: there was no will to learn it (grade eleven student).

Reading is important, but I'm self-motivated. School had little to do with my interest except to help it along: it was always there. You have an intuitive feeling for it through lots of reading: and putting it into practice is OK., but I'm turned off by the way it's taught - rote - it may be the only way. The technical parts of it turn people off (grade thirteen student).

For teachers, such attitudes alone would make instruction difficult and unpleasant. Beyond this, however, the teachers have their own reasons for avoiding an emphasis on writing skills. Like the student quoted above, many have a strong "intuitive" feeling for correct usage and style, but their own university experience has been characterized by literature study. In the colleges of education, literature rather than writing skills has likewise been the object of pedagogy. Thus, by both interest and training many English teachers are oriented to literature studies. If the younger teachers do have any extensive formal acquaintance with the technical aspects of writing, they have neither experience nor guidance in the teaching of formal writing skills, as these comments from English teachers themselves clearly suggest:

Writing skills are not getting proper treatment in high schools, because literature majors teach in the programme.

Kids groan when we get out a grammar text. That's why many teachers find it easier not to teach it: they

have to know it to teach it! Many teachers feel the way the kids do... its easier to deal with the "ideas" in novels.

They don't teach high school teachers how to teach basic skills... presume they won't need to.

We used to have seven or eight periods a week: five of literature and three of composition. Now we have five a week. Today many teachers have never taught a composition period in their life; they don't do it even where the department head says: "These periods will be composition and grammar." They're not getting this at O.C.E. (Ontario College of Education) or Althouse either. I had a student teacher in here last year who hadn't had any!

There are signs of a return to concern with writing skills. A school adjacent to Albertain, under the same board, has developed an "innovative" curriculum in grammar and composition which is so thoroughly traditional that it has, for many, the ring of newness. Similarly, all the schools in the community have introduced some "basic skills" package - essentially remedial - into the core grade nine offering. In spite of such important indices of concern, however, our interviewing, our review of curricula, and our classroom observations showed but little time or effort spent either formally or incidentally upon the systematic improvement of writing skills. Moreover, the thrust of many literature courses lay in the direction of content discussion rather than strong demands for growth in reading depth, comprehension, vocabulary, or sense of structure and style. Finally, it was evident that both teachers and students find the current focus comfortable, and that both offer some informal resistance to the renewed emphasis of writing skills.

Of course, the value of formal instruction in grammar and composition has been seriously questioned by educational researchers and planners. One cannot assume that the decline in such emphasis is causally

important in relation to present deficiencies, therefore, nor that their current reintroduction is an effective remedy. The important point is that they have not, in practice, been supplanted by effective alternate strategies or modes of skill-building. Hence, they are returning to vogue. Without any implied evaluation of other outcomes related to the present bent of English studies, it is possible to assert, in sum, that writing skills, and to some extent even reading skills, have been downgraded and displaced.

The Support of the Ministry and School Board

Given the drift and variability of both English and mathematics instruction in the secondary school, one might well ask about the cognizance and involvement of both regional boards and the education ministry. Principals and teachers soon provided, for us, a clear picture of the way in which they viewed the educational superstructure outside their own schools:

The Ministry doesn't play a large role anymore: their guidelines and inspectors don't really affect the day to day operations of the school. They don't really influence us much: they're there and that's it.

There's no input from the Board, and I don't know whether anyone has looked at the Ministry guidelines in years. I don't think I have.

The Ministry guidelines are sufficiently vague to allow us to do what we want!

The Ministry guidelines are so far back in history that we don't look at them very often. The only time we get them out is when an administrator wants to see them. Content is poorly defined and there's not a great deal of method.

We've no coordinator in the County for English and no one with responsibility for liaison K-13.

With the grade nine and ten there's a non-existent course of study. Everyone does their own thing; I can do anything I like. Maybe there's too much freedom, especially regarding grade nine and ten programme content. It's unfair to the kids.

From one perspective, of course, such comments reflect lack of awareness or misunderstanding of the policy shifts, decentralization, and new sharing of responsibilities intended by the Ministry, as described earlier in relation to the elementary sector. The result, however, is a largely unexpected autonomy at the level of the school and classroom. Each of the schools acts more or less independently despite several inter-school subject area committees and a concern for cooperation on the part of several senior board officials. Schools virtually go their own way, under the influence of senior teachers, department heads and principals. Again, within the curricula and position statements developed at the individual school level, each teacher exercises a great deal of discretion concerning the activities within his own classroom. In any case, these have a low visibility to colleagues and administrators. New freedoms have been generally welcomed by principals, department heads and senior teachers, who nevertheless recognize the burden of uncertainties laid upon less skilled and experienced teachers:

The Ministry has watered curriculum down to the point where teachers who need more direction are floundering: it works for some teachers but not universally (Principal).

Lack of direction from the Ministry in this area (writing skills) has left teachers floundering about how to teach these things; consequently, they have not been taught. We deplore the action of the Ministry in not approving books like "Mastering Effective English", or "Learning to Write" (Head of English).

The fault is with the Ministry: no direction. There's variety and no standardization: it puts a big workload on the teacher in preparation. We'd like more specific direction from the Ministry: more so regarding levels of performance rather than content (experienced teacher).

Trustees are inclined to leave the specifics of curricula to the expertise of their professional employees and are likely to become involved only when some area of study emerges as a focus of public or media concern. Even then, debate takes the form of discussion around general guidelines or objectives, leaving the concrete details of implementation to board-level employees, principals, and teachers. Aside from a recent reassertion of renewed interest in basics, and in the general problems of the curriculum development process, the efforts of the trustees have had little visible impact upon the extent or quality of basic skills instruction. At the board level, resources for extensive curriculum development and dissemination of tactics or materials are simply not now available. Such work as can be done involves committees which draw upon the teachers in the system: the painfully slow results are, predictably, accommodative of present diversities, and, like Ministry guidelines, more useful to establishing broad expected outcomes than either classroom practices or performance standards. Moreover, board-level curricular efforts do not, at the moment, weigh heavily in terms of interest or accountability with the classroom teachers themselves.

In brief, the secondary schools appear to be responding, almost independently, to the climate of public and professional opinion rather than to any strong direction from the Ministry or the Albertain Board. This is true in spite of the fact that many teachers welcomed recent promises of stronger and more specific guidelines to content, method, and performance standards in the teaching of basics (Wells, November 12, November 26, 1976).

The Application of Skills:

If one limits attention to formal instruction in English or mathematics, which, after all, forms but a small part of the student's school experience, it is impossible to understand either student attitudes or levels of achievement. The skill levels which the students will demonstrate outside the school, at work for example, reflect a much broader socialization than that governed by teachers in basics. Earlier, we argued for the continuous strength of home, neighbourhood, and media in shaping both skills and motivation; similarly, the school experience outside English and mathematics classes affords a broader setting in which the student tests, to some extent, the utility and external valuation of basic skill-learning. Indeed, consistency in expectations and monitoring of basic skills throughout the secondary curriculum emerged as perhaps the single most crucial factor governing the growth of skills at this level. There are numerous opportunities for incidental learning or review of both mathematics and communication skills, routinely exploited by some teachers and departments but ignored by a majority of others.

English is the only department that insists on formal writing skills. History, Geography and Science teachers have given up on reenforcing skills (Teacher).

Although many of the teachers verbalized attention to basics, the accounts of their students suggested a real overstatement of the degree to which such skills were actually monitored. Moreover, the sanctions most meaningful to the students - grades and promotions - are not invoked. From this restraint, the insightful and pragmatic pupils draw appropriate inferences:

Some teachers feel that students should not fail in another subject because of grammar and spelling: one science teacher said his pupils were not going to lose marks on the basis of spelling (Teacher).

We monitor it - writing skill - and teach it, but do not take marks off... no sense punishing the kid. That's what I tell the staff to do (Technical teacher).

Teachers have resisted, quite strongly, any pressures for greater involvement in the task of upgrading basic skills. One principal noted this sort of difficulty in his own school:

On demand from the English Department, we're supposed to require sentence answers, to deduct marks for grammar and spelling in formal evaluation. We're trying to implement that this year as policy, but some teachers resist. They say, "I have enough trouble teaching science without that sort of thing."

Such resistance has two basic roots. In the first instance, the relevance of the basic skills is not unlimited. There are many areas of contemporary science, technology or applied arts where the applicability of any but the simplest reading or writing skills is questionable, at the secondary level. The custom of the school now incorporates a variety of strategies for minimizing the dependencies of other subject areas upon reading and writing skills. The classroom teaching of materials already covered by readings, extensive substitution of electronic media for print, provision of notes by blackboard or ditto, use of multiple-choice, point answer, or single-word format for exams, and a generally greater reliance upon oral communication for instructions, feed-back, and evaluation, all contribute to a declining currency of literacy skills in many areas.

I'm annoyed by the lack of emphasis on basic language skills on the part of other teachers. They may know of the problem, but they've lived with it so long they have found their own way around it. For example, they avoid the problem by using true-false tests.

Similarly, demands for numeracy are largely irrelevant or can be evaded in many traditional humanistic or social science areas.

In the second instance, even where particular skills are seen as important, the degree of specialization and division of labour amongst secondary personnel leads to the presumption that skill-building or remedial activity is the job of a fellow specialist. Shortcomings in mathematical or communication capabilities simply mean, for many teachers, that some other specialist has not "done his job". The following views, from a mathematics head, indicate an unusual willingness to reenforce the earlier efforts of the elementary school, as well as an awareness of the resistance from other departments also making use of basic computational skill:

We should do fundamental arithmetic and drill right through. It's very much part of our function but sadly neglected. We shouldn't complain about background skills: the teacher should pretest and refine the skills as required. Carry-over is nebulous: skills may have been well taught and should be there in the background. Yet some teachers are frustrated by the interruption of flow in their own "thing". Commercial, science, or technical teachers take the attitude that it's the job of the math department: they don't teach or monitor the basic skills.

Thus, there exists a strong resistance to auditing or sanctioning performance in basic skills on the part of the school's many subject specialists, either

because they see such skills as irrelevant or because they are committed to a radical division of responsibilities for learning. The latter is, of course, supported in principle by the policy of subject-promotion which legitimates the notion that progress in special subject areas may be independent of reading, writing, or computational abilities. Teacher attitudes are strongly supported by the prevailing discipline (subject) orientation which has been a keynote in the professionalization movement and the skill claims of secondary teachers throughout the past decade.

What does all of this mean to the students themselves? Our data from student interviews, as well as the observations of the teachers, lead to the conclusion that the effects are highly consequential for both performance levels and motivation. First, there is a strong tendency for students to "compartmentalize" their activities after the model of the curriculum and the teachers. Pupils come to view correct grammar and spelling, for example, as esoteric skills relevant only to teachers of English, and indeed not to all of these. The following interpretations were made by senior students:

Teachers don't bother to teach anyone grammar around here... none since grade eight. There was some correction in creative writing but it was more idea- and expression-oriented. In other courses, they don't bother with spelling and grammar. It all depends on the teacher: some feel its important and some don't. It's not important at all according to some teachers.

Some teachers in the past were strict on spelling; some were not. Some emphasized reading, others grammar. Now the teachers are stressing grammar and spelling more... and my parents stress it too. I think we should have grammar along with literature each year.

The above comments reflect not only the fluctuation of expectations from class to class, but

also from year to year as the teachers respond sporadically to the tide of public and administrative concern over basics. Teachers, as well, observed the degree to which basic skills were viewed by students as isolated, subject-specific demands:

Students isolate subjects; teachers try to use basic skills in other classes and activities but students see things as isolated units.

In geography, they say "Why do you have to mark spelling? This isn't English." They have the feeling that if they can write their name and watch TV they don't need other skills.

This fragmentation of learning leads to the inference that the demands of the school are, indeed, inconsistent or arbitrary. In turn, students respond by rationing very pragmatically the effort and time given to review or mastery of basic skills. Many teachers indicated, as reported above, that a large part of the problem in an area such as writing skills was due to carelessness. They observed that students took neither time nor interest to apply the skills they did have. Such lessening of care seems, to us, a very rational response of the student to what he perceives, correctly, as a lack of caring on the part of his teachers in many classes:

The teachers don't really put that much emphasis on good grammar and that.... It's mostly content... whether you've got good information. I don't worry the same when it's not an English assignment: I know the teacher won't take marks off.

To the extent that students become aware that proficiency in basics is neither appraised nor demanded consistently, even throughout the environment of the school, their evaluation of the worth of such skills

and their motivation are correspondingly weakened. In part, as we shall see, this may be a somewhat realistic adjustment of both school and pupils to changes in the societal use and valuation of such skills.

Performance Standards

There are no Mickey Mouse courses... just Mickey Mouse teachers.

This remark, from one of our teacher interviewees, was among many which recalled attention to the gap between the educational system as it exists on paper and as it is implemented by teachers and students on a day to day basis in the classroom. Studies which focus on written curricula, pedagogical or philosophical position papers, or even upon the supposedly "hard" data of grades and failure rates may in fact be perilously out of touch with the actual experiences of the participants. What is really being taught may or may not, as we have seen, conform to stated curricular goals and requirements. Likewise, grade distributions and failure rates may say little about real standards of performance.

Teachers were not at all hesitant in admitting a significant relaxation of performance standards, in the interest of declining failure rates for a more heterogeneous student population:

We have an enormous range of skills within the same class. We need an individualized programme but we don't have it. Yet failure rates have gone down - way down. It really does affect standards more than failure rates (Teacher of English).

Somebody up there tells me I must not fail more than twenty per cent ... it's not written, but it makes me feel like a prostitute. I'll put up with all the inspection, but it's not fair to me or the students not

to fail. The rates are not valid. I'm keeping down those who could do extra work for the thirty who should not be in the course at all: I can't let them fail (Teacher of mathematics).

In most cases, teachers adjust failure rates by accommodating performance standards to the available student population and to what they perceive as the expectations of school administrators. Occasionally, however, a teacher takes his performance norms from some other - and for the school, inappropriate - reference group. The result is a violation of the expectations of students, fellow teachers and administrators, whose sanctions are then felt:

Our grade thirteen biology teacher failed two-thirds of the class; he had to account for it. They asked "Why didn't you teach at the level where the kids were?" He argued, "If they go to university they will be expected to know certain things and have skills."

Almost invariably, when our teacher respondents broached the question of performance standards, distinctions were made between "four" and "five" year students. Some teachers did express concern over the dilution of standards in advanced level courses resulting from choices made by students lacking necessary abilities or desirable prerequisites. In general, however, there was a strong consensus that the real problems lay with the very large population of four year students in the general level courses, as these typical comments from principals, department heads, and guidance counsellors show:

Our failure rate is lower than in the past because of changes in standards for the four year courses (Mathematics head) .

My own impression is that standards have decreased, particularly for the four year student... it's an easy way to get through high school. Teachers are frustrated because of the big gap between their standards and the students' performance. Our marks were always too low and the principal made us doctor them. Later we asked, "Why are we bothering to grade?"

There's been less effect on secondary standards for five year studies: in the four year we find a greater skewing now... find some who are virtually illiterate.

We have a better system now, with more choice, but I don't know about our standards. We have two levels of difficulty here, and I feel that compared with five or ten years ago the five level are about the same; but of the four level I would say we've been forced to change our standards. For example, there's little or any homework for the four level.

Declining performance standards are recognized by the teachers themselves, then, although they are concealed by the resultant lowering of failure rates.

There are a number of reasons, some obvious and some rather more subtle, for this recent adjustment of expectations. Most apparent, of course, is the need to accommodate the variability in skills encountered in incoming students. Policies of continuous progress and social promotion bring to the secondary school a substantial minority of skill-deficient youngsters who simply cannot all be failed without serious risks of discouragement and premature school-leaving, not to mention the political and administrative consequences. Minimum performance standards are pulled downward slightly, but forcefully, by the presence of increasing numbers of such students at the lower end of the skill and motivation spectrum. As one department head with more than twenty years of teaching experience commented:

It makes our dealing with year one very difficult. There is a great deal more heterogeneity and variability in their skills. Some of these people in the past would just not have come into our classes. We've had to modify our grade nine courses: our standards in English are not as high as they were in times past. Failure rates in English have dropped... much lower than they used to be.

The following representative corroboration came from the account of a guidance counsellor:

I think that the school does not look at where the student is at in terms of basic skills: if a student in eleven is at grade nine reading level, we feel committed to the grade eleven curriculum. The whole concept of failure has been thrown out: he's been passed along and we have to take a different approach.

A second important factor is the belief, on the part of many teachers and students that the older, "tougher" standards of correct usage or mental arithmetic are no longer held outside the school. Despite an occasional public outcry concerning skills, it is apparent from inside the secondary school that graduates are indeed finding and holding jobs. Alternatively, they are pursuing their post-secondary studies with apparent success. The head of a commercial department, with some three decades of experience in teaching as well as recurrent sojourns in the business world, put it this way:

They may meet lower standards in the work world, not only in quality of work but in punctuality. I would be suspicious of the "standards" of employers: they may articulate standards they do not enforce.

The same gap between real and verbalized standards was noted by one counsellor:

When you talk with the Kiwanis and so 'on, they're convinced that the school system is not producing the kind of product they want; yet more employers then ever are phoning this office and asking for students based on prior experience with our graduates.

Many teachers also made reference to what they observed to be a relaxation of demands on the part of post-secondary institutions, a traditional point of reference for the secondary schools. One principal expressed this very strongly:

The greatest contribution to the erosion of (secondary) standards is the post-secondary dilution of standards!

A third influence, cited by a large number of the teachers, is the absence of any uniform external criteria such as the now-abolished grade thirteen "departmental" examinations. Of course, policies of regional curricular diversification and adaptation would have been at variance with the continued use of these rigorously standardized tests, but many teachers feel that no recognized bench mark remains. When we invited teachers to describe for us the way in which they, personally, determined appropriate standards for their classes, the most frequent responses had to do with grade-level texts or teaching materials, the abilities demonstrated by students, the advice of colleagues, or their own experience of other classes. References external to the school were only rarely mentioned. This suggests that standards are now consensually developed within particular schools or classrooms and may thus admit of quite substantial variation. Teachers generally emphasized the importance of the shift away from departmental exams as a real and symbolic turning point for declining expectations:

In grade thirteen, I take time to review grade nine and ten work: they should know it but they don't. Standards have dropped. We pass a higher per cent of students than ten years ago; it started when they abolished the grade thirteen exams. Those who would not have been passed before just go on; now we pass just about everyone. It tells at university level (Head of mathematics).

What is important about the grade thirteen exams is the demise of standards linked to them.

Without overstating the role of organizational pressures, a fourth causal link can be established in relation to departmental growth, teacher prestige, job-security, and promotional opportunities. Under conditions of relatively free curricular choice, the careers of the discipline specialists and the fate of their departments became, perforce, responsive to patterns of student enrolment. It is no secret within the schools that a certain proportion of student choices, though not all by any means, may be strongly influenced by the level of demands and prospects of a successful credit. In the words of one experienced teacher and counsellor:

Kids run from hard subjects today... many attempt to abandon a programme the moment it gets hard.

In turn, some pressure for accommodative performance standards, in the interests of recruitment and growth, does filter through to the teachers, whose own careers are not unaffected. One respondent put it very bluntly for us:

In subjects where the number of students is important, standards may have been lowered in order to keep jobs.

Closely related to the problems of skill heterogeneity described earlier, a fifth set of pressures upon standards arises from the recognized mandate to greater student retention. Accepted societal and political goals of increased educational access, as an instrument of socio-economic mobility, have accompanied the shift of Ontario schools from elitist to more egalitarian modes. Under a more rigorous system of promotion and failure, selection processes favoured advantaged socio-economic populations. Growing retention of the disadvantaged population at all levels, but particularly up to the point of post-secondary access, was to be taken as an index of the success of the school in compensating for social or economic inequalities. To the extent that the school system alone cannot eliminate initial and continuing disparities in achievement, the adjustment of performance standards can yet produce the same visible outcome - the retention of larger numbers of pupils reflecting a broader ethnic, geographic and socio-economic base:

The Department of Education has lowered standards. There's a lack of conformity now and you can water down courses.

The real problem is that no one knows what the standard is... no one in education!

To summarize, the downward adjustment of performance expectations, especially in general level work, reflects (1) a response to the heterogeneity of skill levels produced by continuous progress, (2) the perception of declining expectations outside the school in post-secondary and work environments, (3) the disappearance of external standardized examination criteria, (4) organizational pressures of subject recruitment and growth, (5) the societal and political mandate of student retention, and (6) the effects of a long period of innovation and decentralization in curricula.

Remedial Routes

Although systematic efforts to remedy basic skills within the secondary school are relatively recent in origin, it is possible to make some assessment of problems and prospects. Basically, three sorts of remedial enterprise were in evidence in our community: designated first or second year remedial classes in English and mathematics, individual or small group remedial tutoring in the same areas (generally on a referral basis), and modified common (open level) first year communications courses involving a review of basics for all incoming students. The allocation of specialized, dedicated and competent personnel, as well as the creation of new facilities such as the "reading labs", appears to have had a very positive effect upon student motivation in reading, although formal grammar still elicits negative feeling from most pupils. Indeed, the attitudes of pupils, teachers, administrators, and trustees are key determinants of the success of such programmes. Where work is defined as remedial rather than common to peers, there may be reluctance to participate on the part of the student, despite some sense of personal inadequacy or even shame:

Students are hesitant to admit problems in reading ... the real reason behind many discipline problems. They're afraid to be wrong... a loser.

Peers put down remedial work, and peer pressure is important to them. Kids will fail rather than take remedial work.

Continuous progress is what makes my job necessary... it's more than a couple of kids: some kids have been promoted, without passing, from grade five on! They're turned off: it's a pattern of failure and they know it. They don't like being forced to do children's work. Sometimes it's impossible to remediate (sic)! (Teacher of remedial classes)

Teaching staff, in many instances, also exhibited a lack of support for remedial efforts. Many teachers took minimal interest in the identification and referral of problem cases from their own classrooms. Some departments, as a whole, likewise made little effort to cooperate or coordinate activities with the remedial programme. One remedial teacher probably understated her problems in the following description of such difficulties:

What I do is not reenforced anywhere else. It's futile because of this, but I feel it's important none the less. Other teachers have little interest in reading as a method; they emphasize content only. I knew this when I took the job!

While the majority of school administrators gave active support to remedial facilities and programmes, some trustees seemed to regard the undertaking as an expensive, even expendable frill. In one instance, a most effective programme was almost terminated in the trimming of budgets, under current provincial pressures for restraint. In sum, then, both individualized and group efforts at remedial work are generally well implemented, but are nevertheless extremely restricted in impact due both to their isolation within a one year course or other narrow time slot, and to continuing resistance from some pupils, teachers, and trustees. In the case of the trustees, attitudes were particularly inconsistent, given repeated public statements of concern over basics.

Another sort of remedial enterprise was apparent in two special student streams, one within the "technical" secondary school and another within separate junior high schools. These programmes, unlike the piecemeal and subject-specific approach in the composite schools, offered a more consistent and thorough remedial package through grades nine and ten, in settings which elicited more supportive attitudes from both teachers and pupils. In these streams, virtually all students can be assumed skill-deficient,

so that some adjustment can be made throughout the curriculum. At the same time, new peer proficiency norms are informally established. Teachers described their populations in these terms:

All of our students lack basic skills. It seems ridiculous to teach them algebra when they lack the basics!

I have a number of kids who can't read. I have to read questions to them... have to use all kinds of examples, concrete examples. Such problems are typical; if there is any ambiguity or complexity in questions, they have trouble.

Many don't have the (math) skills requisite to shop work: many can't read the rules or do multiplication. The majority want to be working (shops) all the time; they don't want anything to do with study or notes.

Where the lack of proficiencies and motivation are recognized in this way, a consistency of staff effort, expectations and commitment can be mobilized. Like the private school, paradoxically, the two year vocational school had a strong sense of mission and purpose amongst the staff, who saw themselves as meeting needs outside the regular public system, for a unique clientele. They saw themselves as challenged in a special way in terms of their skills as teachers and role models, despite their status as relative "outsiders" to teachers in the larger composite schools. In turn, students reacted very positively to this staff interest and to the relaxation of pressures from more competent peers:

It was a big improvement here: it was the teacher. He gets down to our level... boosts our morale... lets us work at our own speed. That's a lot easier on people.

In reflecting on their earlier school experiences, students expressed an awareness of the way in which skill deficiencies had affected their deportment as well as motivation.

I had a lot of trouble in elementary school... reading mostly... my attendance was bad because I hated it. I didn't like reading out loud.

When I came here (grade nine) I'd mix up the word "it" from "is". Now I can do it better. I didn't know how to read or spell so I came here for remedial: they just didn't want me at the (elementary) school no more. I knew I was behind in grades seven and eight: people would say, "Look at him in grade eight and can't even read!" It makes you feel out of place. Sometimes the other kids still laugh at me, but I let on that I don't hear them.

In addition, most student interviewees indicated an improved self-esteem and sense of accomplishment in the wholly remedial setting. What was striking, indeed, was the strong evidence that these were virtually all pupils whose social and academic problems had been visible for many years, pupils with whom the regular elementary schools had been able to accomplish little. There was, moreover, a strong suggestion that problems had amplified while attitudes hardened over the unsuccessful elementary years. A number of comments from teachers working with these streams supported our inference that the sorting and remedial undertaking after grade eight was far too late for maximum effectiveness:

Skill deficiencies must be detected early; by the end of grade one at least. Every year that deficiencies are allowed to go unhelped will demand more and more time and effort by the staff to overcome. It becomes a harder programme at our level (grade nine) - totally ineffective. It comes from the myth that the

better the teacher the higher the grade taught. It's fallacious: pedagogy is so important in the early grades.

One of the serious problems attached to two year remediation efforts is the continuation of the school career after grade ten. Many students, of course, move directly into the work world, but others are well into a recovery process which can be profitably prolonged. The technical school has implemented a two year continuation programme leading to the Secondary School Graduation Diploma (grade twelve). There are two serious problems attaching to such a move. First, standards are not directly comparable to those in the four year programme in the composite schools, as teachers and administrators readily admit. This generates questions concerning transfer to college programmes. Such questions are only now being raised as the first graduates appear. A second, more serious problem is that the interest in a four year stream will feed back concerns for more "competent" recruits in the earlier years, and for higher standards throughout, defeating the original purpose and effectiveness of a programme tailored to the "losers" in the system. It is the belief of the feeder schools that this is already occurring despite the denials of staff and administrators.

The efforts of the separate junior high schools, concentrated exclusively in grades nine and ten, also confront difficulties in both student recruitment and placement. Threatened competitively in the retention of students to build the newly established grades nine and ten, the separate schools found themselves initially disadvantaged in recruiting the bulk of the academically competent. Pupils whose grade eight performance did not warrant promotion, however, were retained on the promise of remedial nine and ten opportunities. Supported by many parents who had negative feelings about the public technical school, the selective recruitment gave rise to a remedial programme accounting for almost half the senior population of the separate schools. Transition to the

composite schools was not welcomed in grade eleven, however, where alleged discontinuities in shop skills were cited as one problem. In general, these separate remedial streams also had good morale and some competent instruction. but the effort appeared to be late in the careers of the students involved, and problematic in continuation.

SKILLS, SOCIAL STRUCTURE, AND SUB-CULTURES

In probing the achievements of students in basic skill areas, we tapped, of necessity, a number of the factors affecting achievement levels in general. Of these, none appeared to be more important than the influence of the ethos or normative climate in the school today; teachers and pupils alike introduced this notion regularly and spontaneously into our discussions. Indeed, variability in the learning of basic skills may have far less to do with curricula and pedagogy than with the motivation, accountability, and expectations of students or teachers. Learning patterns reflect the real "definition of the situation" sustained by the participants independently of their verbalized, ideal norms. Some identification of trends here is a most salient aspect of our attempt to locate and weight the problems of skill acquisition.

Workload and Work-Related Attitudes

It is important to recall that no amount of energy directed to the improvement of curricula or pedagogy will prove effective unless there is an adequate reciprocal ground of student time and attention upon which to build. Such student response cannot be taken for granted, assumed available on demand, or presumed as a function of physical presence during the school day: it is problematic in many cases.

If the school was ever the focus of the adolescent sub-culture, with student self-conception centred on the academic role, this is certainly not the case for many youngsters today. The school is a milieu, a

setting in which the young person finds a number of roles beyond that of student, and into which he insinuates roles and concerns determined outside the school:

Ten years ago school was the focal point... no longer.

Many kids are more interested in socialization (sociability) than in the work. Their willingness to concentrate on school work is limited by this. Getting along with others is more important than learning things.

Students now are less school-oriented; they resent teachers' attempts to put school first, before the job. In general, they don't have the desire to work hard... an "I will get through" attitude.

These comments identify two major areas of interest which, for many students, take priority over any academic concerns. Clearly, there is nothing new in the significance of adolescent social pressures, or in the attraction to remunerated work roles; what is of growing significance is the degree to which those interests have been legitimated and encouraged by the new "mood" of the school. Philosophical and structural changes have weakened the pressures to academic role-performance while enhancing opportunities to explore recreational or work roles as focal concerns:

When I came to this school there was a philosophy that students had a life outside school: we didn't have to burden them with homework. I tried it. Then we experimented with non-compulsory attendance at school. Students lost credits due to poorly defined responsibilities.... We're not really taxing the abilities of our students: it's been the mood of the secondary school in the last five years that we've been letting up on them.

One senior administrator also saw attendance patterns as an index of these shifts in priorities:

Kids don't come to school... (they) skip classes. It's worse now than it's ever been: maybe one out of ten now where before it was one out of a thousand. Kids don't see school life and school work as their number one priority. Today they have a whole different life outside school with a downward shift of academic priorities.

One school in the community had undertaken a careful survey of the part-time work involvement of all students sixteen years of age or older. Some seventy per cent worked regularly during the week, sixty-seven per cent worked on weekends, and some fifty-six per cent of all students worked more than ten hours a week. These figures were not atypical: although survey data were not available from other schools, the estimates of guidance counsellors and others indicated similar rates:

About eighty per cent of our students would have jobs. A lot of them like their jobs better than school. A lot work long hours.

About seventy per cent have jobs. In many instances they do not work up to their potential due to time constraints. Many perceive the job as being more significant than school. They'd miss school, for example, rather than work.

Our data on the employment patterns of Albertown students suggested a somewhat higher labour force involvement than might have been anticipated from earlier surveys. Statistics Canada (1971) had reported 24.2 per cent of students in grades six to thirteen regularly employed, 33.2 per cent occasionally employed, and 42.6 per cent never employed, for the

Province of Ontario as a whole. The corresponding percentages on a national basis were 22.5 per cent, 35.6 per cent, and 41.9 per cent respectively. Higher levels of student employment may be accounted for in part by Albertown's opportunity structure, rich by comparison with many rural and disadvantaged areas included in provincial and national data. In part, they may also reflect changes over the five year interval prior to our inquiry.

Work commitments were not always interpreted as competitive with academic concerns; in some instances, low-level employment was viewed as an incentive to remain in school. In other cases, positive attitudes or work habits acquired on the job were seen to feed back into performance within the school.

Work is only one of a number of attractions external to the school which, for some students, displace interest or involvement in the business of learning. Rightly or wrongly, the school seems to lean toward accommodation to these new priorities rather than the reassertion of any academic precedence.

One such accommodation is to be found in the rather startling changes in both workload and student attitudes toward work. In our inquiry, these emerged as critical variables affecting the amount and quality of work actually done in basics, as in all other areas. These comments from students give some indication of prevalent views on the value and necessity of hard work:

I wouldn't put a really high value on working hard, but I'm going through to get what I can get out of it (school) for myself. Some are not... just going through to get it done and get the credits (Grade ten).

If I don't feel like going to class and doing work, I don't. I've been doing that for four years. I get bored with (school) and want to quit but my parents won't let me (Grade twelve).

The kids won't push themselves too hard: they may figure it's an easy credit and don't do any work. You

don't have to be too hardworking but some kids figure you don't have to go or hand in assignments (Grade thirteen).

I work alone (in remedial math class). Most of the time I don't feel like working, so I don't do anything. When I feel like it, I work (Grade nine).

Parallel comments from teachers, some of whom had more than twenty or thirty years of teaching experience as a comparative base, confirmed these changes in work habits and attitudes as a focus of teacher concern:

Kids don't have to carry as heavy a workload as they used to, not just in school but in society as a whole.

Society as a whole has influenced the kids... they don't want to work: no time for knowledge... no desire to learn... a lack of purpose.

Students seem to have lower academic achievement and poorer work habits: coming unprepared to class, work put off or done in a shoddy way.

We were so fed up with work attitudes earlier this year that the subject coordinators and I held a meeting to tell them they were immature. We couldn't do any more for them! (Vice-principal).

Students... very mark conscious, yet not in love with hard work: lots of complaints about workload being too heavy.

The emphasis here could easily be misunderstood. Obviously there are quite a number of students who continue to apply themselves, devoting substantial time and interest to the academic core of school life. Again, the problem of poor work habits for some students is anything but new. Nevertheless, the shift

in climate - in prevailing values and norms - greatly extends the scope of such a problem, eliciting changes in the expectations of teachers and the organization of activities which may affect even the most actively engaged pupils.

Withdrawal of time and effort from the academic enterprise may be symptomatic of a more fundamental shift involving the nature of the student role. Traditionally, that role has been legitimated through visible linkages to occupational attainments, income, life-style and social prestige. Extrinsic significance was generally matched by a relatively high degree of intrinsic meaning, of ego-involvement or role-commitment. As the structural significance of the student role comes increasingly into question and linkages to material success, security, or social valuation are less visible and more complex, role-distance - the disengagement of "self" from the demands and implications of the role - may be growing. What teachers so frequently referred to as a "lack of caring" on the part of students today suggests that the young person's self-evaluations may be increasingly independent of feedback concerning his performance in the role of "student". It should be noted that such a change, if indeed it is occurring, would bear a direct relation to the educational reform objectives of the past decade, as would the heightened meaning of social and interpersonal valuations:

At our October staff meeting we raised the question of whether the kids care. They're a product of the affluent society: commitment is not necessary... many alternatives open. Society is not as quality-conscious as it was a few years ago. Kids have seen success as a result of ability or opportunism rather than hard work. The urgency of education as job preparation is not here today: people are looking for the easy way. The work ethic is not as much a reality as it was in the fifties.

The general feeling of the students is, "I'm going to put it down the way I feel it." They're satisfied if they get the idea down so they understand it. If you can't understand it, that's your problem.

With the four year types I'm a disciplinarian. I don't expect great understanding from them. They're not university types: "I'm here because I have to be here." What I'm doing is not sufficient to bring a conscientious effort from anyone: the big majority feel that they don't care... a snowball sliding to hell ... has been building up for some time. There's less and less need for people to be independent or self-sufficient, and that's true of society in general. There's no incentive to not just coast along.

Many students, as well as teachers, saw "caring" or commitment as the important distinction between students at various levels of achievement:

Some kids are really poor. There's no in-between; either you're good or poor based on interest. They don't care ... can't be bothered (Student).

How do teachers respond to withdrawals of effort and interest? First, it must be noted that there are a number of teachers whose interests and work habits match those of their students. Teachers' workloads are, to a large extent, responsive to the work generated for their classes: relaxation of work demands for pupils may well ease both the burdens of preparation or grading and those interpersonal strains involved in eliciting work or sanctioning inadequate effort:

We're not as committed to writing in society as a whole. Teaching writing involves a tremendous amount of marking: the workload of teachers is such that they don't do it. There's a change in the work ethic... not many assignments are given (Teacher).

It would be unfair and incorrect to suggest that there are no hard working, conventionally dedicated and involved teachers: we met many of these in the schools. At the same time, observation on a day to day basis in selected schools revealed the presence of a large number of teachers who routinized their activities, held workload to a minimum, and exhibited the same attitudes of "not caring" alleged of the students. There can be no doubt that students are aware of, and sensitive to these work attitudes on the part of some number of teachers.

On the other hand, those teachers struggling with problems of resistance to work report that they are powerless, virtually lacking effective rewards or sanctions with which they can influence student commitment:

It's pretty hard now to pressure a kid to do homework; there's a laissez-faire attitude in the present society... don't push school on them outside of when they're here.

I cannot demand any amount of memorization or drill... they just wouldn't do it, and what could I do about it? The teacher has no sanctions. I always have to think not what is best for the student but what can I do if they won't do it (Mathematics teacher).

I've noticed a change in the student population: questioning and talking back beyond proper respect for the teacher. Anything they are asked to do - if they don't like it - they just say "You can't make me!" (Technical teacher).

Again, it is necessary to caution against interpreting such remarks in relation to all students. The visible problem areas - particularly in certain "general level" courses - must be seen as indices of cultural shifts, the results of which are much more subtle in other classrooms and for other students or teachers.

One response to the weakness of formal sanctions is the continuing effort to raise intrinsic motivational levels by making all work "interesting" or "entertaining". This extension of the "learning should be fun" thinking of the sixties presumes, unrealistically it seems, that learning objectives can be attained without any of the trials of long or difficult learner application. As one mathematics instructor argued:

Every new method has to be watered down to be interesting ... for example, stories rather than straight math. Last year the school superintendant commented to one teacher, "You're not much of a comedian!"

Another teacher expressed his perception of the problem in these terms:

The education system is in a grave situation. They're not getting sufficient fundamentals in math and communication: too much sugar and spice. We can be pleasant, but I don't believe in all smiles; it's not realistic. The school situation is unrealistic both in elementary and secondary school. If the kids knew grammar and basic math coming out of elementary school, then it would be OK; but I'm convinced too much is being thrown at them to keep their interest rather than being strong regarding the need for basics.

Of course, there are implications for performance standards as well, in the kinds of pressures cited here.

Another rather peculiar outcome of shifting attitudes toward work is the paradox of a greater value attaching to effort. Student time and effort are increasingly scarce commodities in the school; as such, they are presumed to have a higher exchange value in relation to academic rewards. When students divert time

and effort from their favoured pursuits into academic tasks set by the school, they may expect to be rewarded on that basis alone:

Standards are watered down: it's not right to pass on the basis of effort, but it is prevalent.

Kids are concerned about essays or papers when they don't get a good mark; they see reward in relation to effort and time spent rather than excellence.

We searched our cohort survey data, which included a brief scale on work orientation, to determine whether we had any indication of important variations either by elementary or secondary schools, or by present position in work or post-secondary studies. Surprisingly, there were no such meaningful variations. While it is reasonable to assume that variability in work attitudes is systematically related to social background factors, our data suggest that the current work ethic is both widespread and largely unrelated to the character of specific educational or work settings within the community. (See appendices A and B for work scale details.)

To recapitulate the concerns expressed in relation to work habits and attitudes, there is evidence of a real decrease in both pupil time and effort allocated to academic tasks. This is accompanied by new values and by lessening of psychic involvement in the school and the student role. Teachers feel largely powerless to monitor or raise levels of work commitment. Finally, related changes have been induced in both pedagogy and performance standards.

Responsibility and Accountability

The structure of the secondary school, as we have seen, affords the student a larger role in both social and academic decision-making. Such freedom can only be termed "responsibility" if the same pupils are in some

way accountable for the outcomes of the choices made. Everywhere, we found evidence that the teachers and administrators were in fact protecting students from the consequences of their use of the new freedoms, translating opportunities for the demonstration of responsibility into tolerance of irresponsibility. Students have much freedom with little accountability:

We should be teaching work habits - get it done - but the pendulum has swung very far towards the permissive. We have a good rapport - that's come out of the changes: but how do you give them a good kick in the pants? We need strong leadership and stiffer discipline.

Most students can't work with deadlines... can't cope with freedom in self-directed work.

Work habits are a concern... and its because of the structure of the school. We need more emphasis on discipline. If I give a student a detention, he says, "Why? I can't come".... (He) argues about being late, being docked marks. There's a lack of concern with being prompt and doing things the way they should be done. It's difficult when not all teachers ask them to toe the mark. Students have freedom, but don't understand responsibility... for example, absence from classes.

Aside from many small matters of deportment or attendance, students are "shielded" in two ways from the consequences of their academic freedom in curricular choice and level of application. First, the credit system of subject-promotion spreads risks and offers alternatives in such a way as to minimize the student's dependency upon any particular course or grade. From the accounts of the teachers, it is clear that students do not view use or abuse of the new freedoms as particularly consequential to their personal or academic futures:

I think there is a real problem: I don't think the kids are working up to their potential. They're not doing their homework. The teacher of (optional math course) has kids who won't work; they know they can drop it.

The permissive atmosphere in school permits a kid to withdraw if they're (sic) in difficulty. They should go back to vital core subjects, but the problem is, what do we do with the kids who fail?

Remarks such as the following, from our conversations with the pupils, offer little to contradict the assessments of the teachers:

I took art because I thought it would be an easy credit... now I'm failing out. I don't like it and I won't do the work. It doesn't worry me because it's not required; I could still take it again if I did like it.... If you haven't put a lot into it you wouldn't worry too much about dropping or failing because it's only one credit and there's four years ahead to make up that credit.

The teachers haven't got time to spend with you: if you aren't doing well they just say "Drop the course... you're wasting your time and mine." Around here you're not pressured; there's always something else to turn to.

Secondly, although the implications of course failure are cushioned by the range of alternatives and the opportunity to "drop" prior to grading, it is becoming, in any case, much more difficult to fail at all. Where per cent failure data were available over the past several years in certain subjects for particular schools, it was evident that rates of failure were indeed declining, as described by the teachers. Moreover, in at least one school, "failures".

in advanced level courses may frequently be turned into successful credits:

We'll give a credit to students in an advanced course if they get a forty. We reward them because they would have passed a general programme.

This policy, of course, virtually eliminates the risk inherent in choosing advanced over general level courses; the student will, in all likelihood, not be held accountable for an inappropriate selection of course, or for an inadequate allocation of time and effort. Predictably, in the same school and only in that school, students were showing a marked increase in preference for advanced work:

Almost all of the kids want to be "five year" kids: even the kid who only plans four years of school. There definitely is a status system. There's an increased selection of "advanced" options. The problem is that there will be either higher failure rates or, unconsciously, standards slip.

Other teachers in the same setting confirmed the effect of such recruitment upon content, pace, and performance standards in the advanced courses.

Teachers throughout Albertown were almost unanimous in their appraisal of the attitudinal response to declining risks of failure:

You don't fail them, and this has brought on a "Why work? I'll pass anyway" attitude.

I detest the elementary policy of no failure. Kids know they won't fail and teachers can't control it: no sanctions! Failure is needed for a certain group; if it isn't there they don't give a damn.

Kids need an opportunity to handle failure: we do them a disservice by making it so easy for them to avoid failure.

The B.A. is devalued and the high school diploma is also being discredited - kids do not realize the value of education, and because the students can pass easily... teachers pass them to get rid of them, to look good, and so on. Students don't care about education because they never fail - never learn from experience. Those "transferred" come with an attitude that makes it difficult to learn.

In this context, as well, teachers recalled the departmental exams as constituting an important sanctioning and screening device entailing risks of failure which could not be removed or contained by the classroom teacher and school administrator:

Three or four times a year I question the move away from standardized grade thirteen testing. It was a motivation, a club sometimes... the "external" exam.

In short, the costs of personal academic mismanagement are held to a minimum in so far as alternatives are made acceptable and readily available and the sanction of failure is increasingly withheld. The nature and extent of these responses within the school suggest freedoms inappropriately used in at least a substantial number of instances. Finally, freedoms divorced from accountability appear to be giving rise to student attitudes of irresponsibility rather than the responsibility intended by advocates of the new freedoms.

One point well made by our teacher interviewees was the continuity of these shifts with what was occurring outside the school:

Society has liberalized, but they don't add

responsibility into it. They blame the school - an easy target - but it's much broader than this.

There's a lack of interest in quality... a general cultural malaise. It's more than what is going on in school, but the school has a large part of the responsibility. It's the structure of the school rather than the content... responsibility given without accountability. As a teacher I often shield students from the consequences of their poor use of responsibility, and they don't learn accountability.

The standards problem lies in that society is asking less of people than what they can give. We've made too many excuses for a job half done. The school is reflecting that attitude; it's a cultural thing.

Although there is an important insight in the notion that these changes are not confined to the school - and we shall return to this in our conclusions - some students felt that the school was quite permissive and not very demanding by comparison with their experiences in the work world. The following comment was reflected a number of times in discussions with students holding part-time employment:

At work there are longer hours... harder work. You can't stop or you won't get paid; that messed up a lot of kids who thought they would just get paid by the hour. It's fairly slack here (at school) ... the kids take their time on the job; in the dealership they have to rush (Report from a student working part-time in an automotive dealership).

Skills and Expectations

The students don't see writing as an extension of self; they don't worry about presenting themselves as

losers. A lot of it is carelessness. If they saw it as being important they could correct fifty per cent of their problems. It's hard to make them see it as important.

In recognizing that students do not generally feel basic skills to be important, this teacher, like many others, identified a critical feature of the student value system underlying both application and achievement patterns.

In the first instance, at an interpersonal level, the preoccupation with oral communication obscures any need for more complex and differentiated skills. Not only do students not see themselves as "losers" in translating rough and ready speech patterns directly into prose; peer norms virtually demand it, for many groups.

As one remedial teacher observed concerning her clientele:

Regarding vocabulary, the attitude is "Why the hell do I want to know all those words? If I use them my friends will laugh at me." They see no use, and won't bother to learn.

Peer norms demand modest levels of achievement and diligence as well, although somewhat higher aspirations are acceptable in more senior courses among the self-identified post-secondary cohort. "Mediocrity norms" were articulated for us by students in this fashion:

I wouldn't like to be a scab, like all A's. I'd rather have a mix.

I think you should be "fair" at it (writing) ... not perfect. I'm not that great in spelling: I make mistakes. Kids don't care that much: English is boring to them.

Perhaps the strongest element behind the relatively low student valuation of basic skills is the projection of future occupational and personal needs. Many students, even from the earlier grades, had already made rather hard-nosed and realistic assessments of their occupational futures, to which they attached estimates of need in various skill areas:

Grammar and spelling don't mean much to me: I just write fast. You seem to develop it yourself more than anything; high school helped me in talking to groups more than written work. For the type of work I like doing (woodworking), I don't see the need for more education. There are people with a university degree working for my dad (owner of woodworking shop) (Grade twelve student).

I don't like writing that much: I'd rather talk about it. I could write better, but I do it fast just to get it finished; then the teacher tells me to do it over. We don't turn in any writing for correction... we just do work in workbooks and the teacher corrects the lesson for the whole class. I like English ... they mark you easy here; not like other schools. I won't use much English for being an auto mechanic, anyway (Grade nine student).

Where the school continues to tell the student that he will be "illiterate", "uneducated", and "unable to cope" with adult occupational, civic, or personal responsibilities in the absence of basic skill proficiencies, the student's observation of family, neighbourhood, media, and early work experiences tells him, in many instances, that there is something unreal or archaic in such pronouncements. Even the teachers themselves are now beginning to have serious doubts about the importance of anything but very minimal skill levels in the world outside the school, as these comments from a principal and a department head clearly indicate:

In my own life... if I worked in a store I wouldn't need math. I don't even have to if I can afford an income tax service. I'm not so sure that the student really sees any need outside the student role. I wonder about whether they feel it's important.

A lot of our staff are concerned about basic skills. The question is: in a McLuhan type society, how far do you lean on a student to spell correctly when he may not need these skills? The total pool of students is not academically oriented: a new cross-section is represented. There's less social pressure to speak or spell well because the public media don't; our society doesn't get up-tight about sentence fragments. It's also a response to demands. If you flunk him he'll respond!

Thus, the relevance and practical importance of both numeracy and literacy are being candidly, albeit covertly reassessed by both students and teachers. In many instances, students are reaching the conclusion that the educational rationale overstates the need for such skills, and they are adjusting their own learning goals accordingly. Staff, too, are beginning to question the value of a continuing, fatiguing and largely unsuccessful struggle to impose levels of literacy or computational skill which may be practically irrelevant to a large number of their pupils.

SUMMARY

The schools of Albertown, like others throughout the Province, have succeeded in retaining most students for the duration of their programmes. By comparison with the earlier rates of retention in our schools (Duffet, 1960) this has been a notable achievement. Have the schools been equally successful in cultivating literacy and numeracy within this expanded student populace?

For the highly motivated, capable students, the schools offer superb opportunities to learn and to prepare for the challenge of post-secondary studies. However, for those who stumbled through elementary school, or who were promoted in spite of poor achievement, the story is grim. Gains through remedial work are meagre and often transitory. Deficient students, who survive the secondary programme more by perseverance than performance, may, in the end, wrest virtually spurious credentials from the schools.

These two groups are faring somewhat as high school pupils have always fared. The very best succeed admirably, and loom disproportionately in the school's view of its own accomplishments; the weakest drop out or scrape through, only to give cause for public criticism of the same schools. Yet these more visible extremes draw attention away from the great mass of students whose abilities and achievements lie somewhere in a middle ground. How well prepared in basics is this larger bulk of the student body? Has the retention of a growing proportion of weaker students merely extended the range of variability in skills, or has it altered instruction and performance standards for a much larger part of the school's population? In the schools of Albertown, it is the latter assessment which seems to be most realistic.

School, as an academic enterprise, no longer monopolizes the concerns of youth, whose preoccupations with part-time work, consumption, dating and mating, or pure sociability and recreation will, at times, all take precedence. The influences of family and neighbourhood, so critical to the elementary setting, are still active and important. To these are added now the growing pressure of the media, in particular those sectors identified with youth culture, youth-dominated consumption patterns, and entertainment values. What emerges is a sub-culture which injects these concerns forcefully into the environment of the school. The climate of expectation and easy achievement cultivated at elementary levels now emerges for a quasi-adult clientele as a culture of consumption, entertainment, and sociability. The new curriculum introduces competitive course-marketing and consumption styles based as much on economy of output as upon concern for

intellectual nutrition. The new pedagogy makes learning fun; in fact, entertainment rather than tough mental challenge is frequently the order of the day. Sociability is also raised to the level of an educational priority, with the advent of broad personal development goals; "getting along" becomes at least as important as "getting ahead" academically. The concerns of the students have thus become the concerns of the school. Traditional skill-development goals, though far from abandoned, are displaced and somewhat overshadowed.

This adaptation of the schools has been a smooth and orderly process, in tune not only with the interests of students, but also with the interests of the politicians, the economists and the public, all of whom favoured broadened retention and post-secondary access. Moreover, the adjustments were attuned, as well, to certain interests of the teachers themselves, in expansion, specialization and occupational advancement.

Fragmentation of the learning experience, at secondary level, into an ever-increasing array of insular disciplines and technologies, has been promoted by the open curriculum and subject-promotion on the one hand, and by the bent toward specialization of teacher expertise and responsibilities on the other. The burden of organizing, coordinating, and integrating the consumption of these discrete chunks of technology, skill or conventional wisdom has fallen squarely upon the shoulders of the student, who is frequently caught off balance. From this perspective, basic skills are a real anomaly. While both curricular structure and teacher specialization presume an almost radical independence amongst the various courses marketed in self-serve fashion, the very notion of "basics" implies a dependence of many subject areas upon the development of numeracy and literacy levels. The difficulties which we have observed and reported in the secondary schools confirm that such dependencies do indeed hold, and that they constrain the overall levels of achievement. Disjunctions between skill in basics and subject-specific course demands have seriously aggravated the problems of workload and performance standards.

As we have seen, students enter the secondary sector with wide variation and notable deficiencies in basic skill attainments. The present fragmented structure of the schools, however, amplifies the impact of such deficiencies rather than remedying them in any effective fashion.

Teacher efforts at remedial work in mathematics and English are sincere; those involved work skillfully and courageously. But the results are meagre and disheartening. Concerned teachers are attempting not only to aid the student in acquiring new skills, but to counteract the burdens of poor work habits, impoverished confidence and inadequate motivation. Their efforts, moreover, meet with indifference and with classroom practices which undermine their teachings within other departments and subject areas. Secondary level remedial work is not a hopeless undertaking, but it effects only small and costly gains.

In sum, problems of skill deficiencies tend to be aggravated rather than eliminated as the student moves through secondary school, despite some valiant remedial undertakings. In turn, these deficiencies pose serious barriers to optimum performance levels in many other areas of the curriculum. Finally, the remarkable adaptation of the school to the skill levels, motivation, and work habits of incoming students, through progressive modulation of curricula, pedagogy, interaction patterns, workload and performance norms, has achieved the goal of increased retention, in spite of any skill deficiencies. In terms of educational quality, however, the cost of these adaptations has been high.

Chapter V

The Employment Sector

At the inception of this study, one major obligation was to explore the fit between the qualifications of students in mathematics and English, and the requirements of the job world in which the student is employed. At the very beginning it is important to restate that basic skills in mathematics and communication are embedded in a cluster of attitudes, habits, and motivation patterns of the student. Likewise, they do not operate as separate entities as far as the worker is concerned; rather they are incidental to the practical tasks that he meets in his job. Furthermore, these skills never function in isolation as far as the judgments of employers are concerned. Hence it is in keeping with the way the employer appraises these skills, and the way the worker brings them into play, that discussion be focussed on the larger constellation of qualifications rather than isolated fragments.

Moreover, the qualifications required by the employer are relative to the specific occupation he has in mind. Those demanded of the girl who packs butter in boxes differ markedly from those of the teller in the cage; but neither set bears much resemblance to those of the molder in the foundry. None of the three makes more than a token demand on the skills most prized by the school system. Because the demands of employers are relative to specific occupations there is little to be gained by dealing with the former as a whole. With few exceptions, the observations that apply to all employers are merely superficial. One can say that employers prefer to employ experienced workers, and hence student workers are at a disadvantage in applying for employment. But it is

only in the context of specific kinds of work in specific organizations that one can grasp an understanding of how academic skills function in the workday world (1).

THE EMPLOYERS IN THE COMMUNITY

In Albertain, one can distinguish five kinds of employers, each of which offers a distinctive kind of employment. The largest component by far in our sample is manufacturing. Almost half of the seventy-five employers that we interviewed were in this field. They were, in the main, big employers; among them they accounted for about five of every six workers sampled. Because of the variety in employment conditions we have distinguished the textile manufacturers from the rest, a heterogeneous collection of heavy industry, furniture, food, and chemicals.

By contrast, the financial institutions of the community comprise a small segment. We contacted five banks with staffs of modest size. They averaged around forty employees, hardly a tenth of the average of manufacturing.

The fourth type we sampled was retail trade, where again the establishments are relatively small, though about twice the average size of the banks.

Finally, we contacted a set of service institutions. Among these were the offices of some of the larger industrial plants and commercial establishments. The largest was the University of Albertain which employed over five hundred office workers, such as clerks, typists, and receptionists; we were able to interview the supervisors of seventy per cent of these workers. In general, such workers provide services not for persons but for organizations.

In summary, we interviewed fifty-three work organizations in the community with a combined

(1) For a systematic overview of the range of situations see Ritzer (1972).

employment of approximately 8,400 workers. The distribution is shown in Table X.

Each of the areas is homogeneous, to a degree, in that it uses a distinctive range of occupations. In the bank there is a preponderance of tellers, ledger keepers, filing clerks and machine operators. Incidentally, these are largely feminine occupations.

In the retail field, three occupations predominate. There we find cashiers, sales clerks and stock clerks. The first two of these work in essentially close relationships with the customers. In some cases one worker performs all three functions.

In the service organizations the clerical occupations predominate. Some of these, such as receptionists and to a degree secretaries, are involved in person-to-person contacts with clients and customers. The larger group provides impersonal services, e.g. the typists, clerk-typists, and the general clerks in filing, mail rooms, accounting, and records. As in the banks, these are largely feminine occupations.

In the textile industry, the machine operators predominate. There are also other kinds of production workers, as well as service labourers engaged, in part, in handling materials. Both men and women workers are found in textiles, but women predominate.

In other manufacturing industries, there is a wider range of occupations; these fall in the semi-skilled and unskilled ranges. There are machine operators and lift truck operators; foundry workers, welders, fitters, and assemblers; storekeepers, and painters. These jobs are essentially masculine in character, though currently the gender division of labour is shifting.

STUDENTS IN EMPLOYMENT

As noted in the introduction, one facet of the study was a set of interviews with those students who had passed through the secondary school system in 1975-76. All of the students were contacted through the good graces of the secondary schools of the

Table X

DISTRIBUTION OF EMPLOYER INTERVIEWS BY TYPE OF EMPLOYMENT

Class of Employer	No. of Employers	No. of Employees
Financial Inst. - Banks	5	190
Commercial - Retail	7	500
Institutional Service	13	570
Manufacturing - Textiles	8	1,080
- Other	20	6,040
Total	53	8,380

community and were invited to fill out a brief questionnaire (see Appendix A). Those replying were thereby invited to volunteer for a follow-up interview which was lengthy and detailed (see Appendix A for interview schedule).

In total, eighty-eight students were contacted and interviewed. Approximately one half of these were employed at the time of the interviewing. The others were enrolled in one or another post-secondary programme of education.

The forty-four student employees were distributed among the various classes of employers noted above. As each of those categories is analysed, the information gleaned from the employees will be incorporated with the comparable information secured from the employers. To that analysis we now turn.

FINANCIAL INSTITUTIONS

In the banks, the preference in hiring is to select candidates who have had previous banking experience or similar background in dealing with customers. The next in line would be university trained girls or the wives of students at the university in Albertown. Given the turnover pattern of universities, it is obvious that there is a substantial supply of both kinds of candidates from which the banks can choose. In this pattern of recruitment of new staff, it is clear that the secondary school "leaver" has a very slight chance of being accepted for employment. According to estimates from the banks, high school students have only one chance in ten of being hired. The banks are thus a meagre source of jobs for students hunting for work. Two of the banks refuse to accept any applicants who are not experienced or who have not attended post-secondary educational institutions. Newspaper advertisements in Albertown papers yield scores of applicants. The "walk-in" applicants are generally adequate to meet the needs of the banks, although their turnover rate of around fifty per cent creates a steady stream of openings.

As noted above, the labour force in the banks is predominantly female; this is particularly the case at the lower levels. Where men are hired they are usually placed in management training programmes. These are generally not open to high school students.

The banks make slight use of part-time workers. Where part-time work emerges, the demand is for experienced tellers to assist at peak periods.

In summary, the major financial institutions offer very few opportunities for the high school student seeking a job. Their selection procedures are geared to other parts of the labour pool.

However, for those cases where high school students are considered, what are the scholarly qualifications that are considered consequential? Without exception, the interviews indicate that the requirement in mathematics is extremely low. "Secondary school mathematics has nothing to do with the bank." Only elementary mathematics is required. There were no cases reported of new employees showing a deficiency in mathematics. It is clear that there is little occasion to use even elementary skills; the calculator is available, and is used even for simple addition and multiplication. Moreover, the installation of computer terminals has eliminated the task of balancing pass books for customers.

In the banks, therefore, mathematical skills have a very limited role. What the employee must develop is accuracy and speed in using the hardware of the system and in transferring information from one location to another. These are skills that are learned and perfected on the job; they require only the simplest grounding in mathematics.

How do matters stand for the other basic skill, for language? The daily work of the clerk and teller involves mainly the writing of the numerals. There are no written reports of consequence. Writing skills come into play only when one reaches supervisory or management positions, and these are largely restricted, in the banks, to a different stream of workers. The demand on the teller and clerk for writing competence comes close to zero. Communication in the bank is oral rather than written. Oral skills, according to the

supervisors interviewed, were the most important qualification in a teller or clerk.

What does oral communication involve? In the banks, good oral communication is equivalent to having a "good personality". It entails a pleasant mode of dealing with customers and co-workers, rather than a set of learned skills. It does not refer to the skills of organizing information and imparting it systematically. It suggests, rather, an intrinsic enjoyment in meeting customers and responding to them. Oral communication in the bank is largely a matter of "presentation of self", or a kind of "impression management". It is connected in the eyes of supervisors with personal grooming, with neatness of dress on the job and with appearance in general. In short, oral communication in the bank makes scant use of skills learned in school.

In brief, the bank employee makes minimal use of her schooling. The demand on mathematical skills is trifling; the need to write is minimal; the skills of communication are those of native personality bolstered by fashion in dress and appearance. Deficiencies in basic skills do not seem to loom as a problem for those who hire students or those who supervise them.

The significance attached to the basic skills in the banking area can be assessed in part by inquiring as to the tests the banks have devised to discriminate amongst prospective employees. In general, the banks make scant use of scholastic tests. Where they do use tests which involve mathematics and language it seems that at least eighty per cent of candidates easily meet their requirements. As one supervisor commented, "You need only grade six math to pass." Where tests are employed seriously, they involve manual skills such as typing, rather than the intellectual basic skills.

How does employment in the bank look from the point of view of the secondary student? Among our students in employment, only one bank teller was encountered. Since her father was employed as a bank manager her selection into this branch of employment may have been facilitated.

Her perceptions of the demands of the job closely parallel the assessments from employers. The work

makes little use of her five years spent in reaching grade thirteen. In her eyes, the bank requires a grade twelve diploma, but it will accept students with grade ten mathematics:

Most of the Mathematics is simple mental arithmetic. You do that about ninety per cent of the day. I use the calculator when I have cheques to add. You have to be careful, or use a lot of time looking for the differences. As for writing, that's mostly forms and transferring figures. Other writing is about two per cent of the time. Reading? Well, I read cheques and deposit slips and signatures. It's not real reading.

The work is worrying. When you count cash you do it three or four times. Always double check work. I don't want to continue as a bank teller. It's routine. There's no challenge. I thought of university, but I didn't like the idea of having to study a lot. I have no goal now.

In hiring this student, the bank has acquired a qualified employee, one who is neither enthusiastic about the job nor eager for promotion.

Viewed in terms of the requirements of the daily work and the demands made at point of selection, one can see little evidence that secondary students are poorly qualified for jobs in banking (Berg, 1970). On the other hand, there are precious few such jobs available to them in Albertown.

RETAIL TRADE

The retailing establishments in Albertown have a pattern of employment which differs from that in the banks. There appears to be much more opportunity for part-time employees in sales work. One of the establishments studied had as much as eighty per cent of its staff in the part-time category. For purposes of our inquiry, the emphasis was on the full-time

employees. However, it was not possible to view these systematically without reference to the part-time workers.

As in the case of the banks, the secondary student is far down the list of preferred employees. Applicants with prior experience in retail work have an advantage, and managers' tended also to stress their preference for "mature" types of workers. They felt that the mature person was a more appropriate representative of the store; moreover, customers felt more at ease in dealing with a cashier or salesperson who acted in a mature fashion. In their eyes, maturity was mainly a matter of age; hence a young secondary student would not fit this perception of what the appropriate salesperson or cashier should be. The managers also viewed the married woman as a desirable choice; in their eyes, household duties and the organization of a home tend to create a mature personality.

A further reason for emphasizing maturity is that the full-time worker probably exercises supervision over part-time employees in the store. Since the latter may themselves be older workers it is diplomatic to choose mature types for this function. Hence, in selecting a salesperson the manager was also providing himself with a stable type of supervisor.

However, when the manager spoke of maturity he meant more than chronological age. The older person was considered more stable in terms of staying with an employer rather than giving up the job early if conditions became unsatisfying. Mature workers could be trusted more as far as handling money is concerned and in their care in handling goods. They were also expected to make themselves more available for overtime than would young workers in the store.

In searching for full-time staff, the manager would turn first to the mature part-time personnel for possible candidates. If a student had shown great perseverance in holding a summer job or had proved himself in some part-time capacity in the store, however, he would be in competition with the kinds of people seeking work from around the university (both students and the wives of students) who would be rated higher in terms of maturity and stability.

In general, the secondary students face a double screening - once at the level of part-time workers and again at the level of full-time workers. As in the banks, few find their way into employment in this sector. For those who pass through the screen, what are the requirements of the employer regarding basic skills? In the field of mathematics the managers gave more impression of the need for basic skills than was noted for the bank employees. But the requirements are still very modest. Only the skills of elementary school mathematics are involved, and here again mechanization is ousting mental arithmetic. The cash register performs the additions and calculates the change. Increasingly, the adding machine and the calculator also have become standard office equipment. Moreover, as one manager noted, the effectiveness of a worker with an adding machine does not depend on mathematical skills; one might be slow and inaccurate with pencil and paper but fast and effective using the calculator. In brief, effectiveness at the cash register, the check-out counter and at the sales desk makes few demands on mathematical skills.

How important are skills in communication? In general, writing constitutes a minute part of the work of those in retail sales. The criticisms that employers make of the writing skills of these workers are of an elementary sort. They concern neatness of handwriting and legibility, rather than the more complex skills of spelling, sentence construction, and so on. It would appear that the writing done on the job application form was the main writing assignment for most of the incoming retail workers.

By way of contrast, sales jobs predominantly involve oral communication. The sales clerk has to meet the customer, talk to the customer, and sell to the customer. In assessing these aspects of selling, the manager or supervisor does not inquire into the applicant's background in grammar, the size of his vocabulary, or the coherence of his paragraphs. He tends to see adequate skills of communication in other terms, such as his enthusiasm, his degree of extroversion, his maturity, and similar attributes. If the salesman exhibits these attitudes toward the job,

then the manager assumes that he can handle the details of oral communication. In other words, a competence in oral communication is subsumed under the practical requirements of a salesman.

By way of generalization, the jobs in retail sales utilize only a very small fragment of the basic skills the schools seek to provide. Only the elementary operations of mathematics are required; writing skills are rarely employed: the skills of oral communication are those of native wit and everyday conversation rather than those generated in classroom courses in English.

The testing devices used to screen job applicants reflect the modest demands of these jobs. By and large there is no use made of writing tests for these workers. Nor is oral communication tested in any systematic way; it is subsumed in the interview session under other aspects of selling. On the other hand, there is a continuing effort to use mathematical tests to screen applicants. Since managers realize that almost no mathematical competence is required on the job the retention of mathematical tests is somewhat nostalgic. Only half the stores make any use of mathematical tests. For one of the firms, among those tested, ninety-five per cent of applicants passed the test satisfactorily. It would appear that deficiencies in mathematics are not a basis for concern among the managers of these establishments.

The interviews with job applicants focussed largely on a set of elements little related to the basic skills. The managers seemed to be searching for enthusiastic workers, for young people who are "not scared of work", for mature candidates, for people with a "good personality", for applicants who were concerned with appearance and grooming, and for people ready to work overtime whenever the occasion arose. Scholarly concerns seem remote from these foci of the employer who is screening applicants; his preoccupations are marginal to the objectives of the academic world.

OFFICE SERVICES

Of the students interviewed, fifteen were employed in service occupations. Their employers included business firms, factory offices, a newspaper, and the post office. Four of them were involved in personal service occupations, but the majority were working in bureaucratized settings. The interviews with these other eleven reflected, with considerable accuracy, the perspectives voiced by employers and supervisors. Some of them expressed the hope that they will find their way back to college or university, but not with great conviction. In general, they are committed to office work. By and large, they view factory work as a very distasteful alternative.

N.Y. followed the technical stream in secondary school. He now works as a letter carrier, and expects soon to be earning twelve thousand dollars per year. (His father works for the post office.):

I had to take English courses. I liked reading good books, but not Shakespeare. I didn't give it any more attention than I had to - same for other subjects. Grade nine and ten was mostly literature. I should have done how to write sentences.

I took technical math...had difficulty remembering formulae. I got confused. The grade twelve math was abstract - way far out. I was bored with school; it wasn't worth my time. Halfway through grade twelve I quit. My friends were out of school, and one got me a job. Then I got this one through Manpower.

In this job I have to read about an hour a day. That's sorting mail. Also have to read street names. The writing is mostly change of address. That takes fifteen to thirty minutes a day.

Where will I go from this job? I'm going to stay with it as long as possible.

N.N. works in an accounting office. She completed grade twelve and found a job with a trust company:

In grade eleven I took "Communication". It was a waste of time. We wrote stories and looked at films. I took it to get an extra credit. I hated reading. I'm a bad reader. I wish I'd got help, but I didn't. I was given a machine to work with but it didn't help at all. If I liked a topic I could write well; if I didn't like it I couldn't care less. I got confused around exam time. And I'm scared to speak up orally.

I got two credits for math in grade nine and ten. But I dropped math in grade eleven. It went too fast, and mixed up algebra and fractions. I was too embarrassed to ask or answer questions.

Outside of school I could talk to anyone. I had a job for fifteen to twenty hours a week, in a supermarket. There I learned how inflation was working, and some of the tricks of the supermarket.

I just applied for this job and got it. I was half in favour of a factory job and half in favour of an office job. I was scared because I'm stupid in math. I love the job.

Reading and writing aren't big parts of the job. You have to be able to listen really good...and know that the customer is always right. But the math is about grade five, where I started dividing. We have computers to add up deposit slips. And there's multiplication for exchange rates. Reading is mostly looking at cheques...or reading a notice from the regional office. The writing is all in the ledgers...or sometimes a letter to a customer if a cheque comes back.

I can move up to other positions like accounting. I'll likely take an accountant's course.

How often am I late for work? Never. When I was in high school I skipped whenever I felt like it. Mom didn't push me to go to school.

The interviews with these students provide an account of dismal experiences with English and mathematics in secondary school. For most of them, the years spent there were neither useful nor rewarding. On the other hand, their current employment makes almost no demands on any skills developed in secondary school.

In these cases, one does not see any reflection of the adverse assessments noted below by the supervisors. What stands out is the readiness of employers to employ students with lamentable academic records. Despite these, the students manage to handle the jobs effectively. Moreover, their standards of performance, of punctuality, and of regularity at work are conspicuously higher than were the corresponding items at school. School, for them, was not a useful preparation for work; nor was it an occasion to develop intellectually, culturally, or socially.

The following discussion deals with general office workers, the people who do the filing, typing, copying, and who receive calls, keep accounts, and take dictation. Most of the work is highly standardized and it dovetails with the sort of training the secondary schools offer in the commercial courses. Hence the high schools are the major source of job applicants, and the students appear to be the preferred type of applicant.

These workers are predominantly feminine. The positions are very largely full-time jobs, in contrast to the jobs in the retail sales area. The turnover in the jobs is relatively low. At the university, with its five hundred or so office workers, the openings run around thirteen a month. The jobs are much sought after; there appear to be a score or more applicants for each opening that is advertised.

As noted above, the general qualifications required for these jobs are those provided by the commercial courses in the secondary schools. Hence applicants are in general drawn from the four year stream in high school and possess the grade twelve diploma. Candidates need typing skills for most positions, with both speed and accuracy expected for the more demanding positions. They also need the basic clerical skills of clear and legible writing, and competence in grammar and spelling. Applicants need this mixture of skills for most positions; they also need a flexibility of manner that permits them to move readily from one sort of work to another. Where the job involves the accounting activities of the office, the applicant will require mathematical competence but, as in the banks, of only an elementary sort.

How well equipped are the secondary students in terms of their basic skills, to handle the demands of these office jobs? The employers report no deficiencies as far as mathematics is concerned. This could imply that the level of competence in mathematics is adequate; however the presence of calculators in the offices indicates that here again the machine may compensate for deficiencies in the worker.

In terms of oral skills, the students are described as being adequate, and perhaps superior to those of the recent past. (But once again the definition of adequacy in oral communication is distinctive; good oral communication was equated with "openness" and "awareness" and "good relations with peers". As in the case of sales personnel and bank personnel, oral communication means something very different from what it means to the teacher of composition.)

The situation in language skills is markedly different. Here one finds widespread dissatisfaction, particularly with respect to writing skills. The dissatisfaction with competence in writing was almost universal. Only one of those employers who had first hand contact with recent secondary school workers failed to express concern over the inadequate standards. The complaints were uniform: sloppy handwriting, misspelled words, incorrect punctuation, and improper grammatical constructions.

A third of the supervisors stated that spelling had deteriorated over the preceding five to ten years in their units. Some of them now supply dictionaries as part of the standard equipment for the office worker. Another third of the supervisors disagreed with the claim of any substantial shift in spelling ability. As evidence, they quoted their own inability to spell, or the difficulties of the managers for whom they worked. In their eyes, the difficulties in spelling were neither a new feature of the school system nor a phenomenon restricted to the recent cohorts of students coming from the schools.

The adverse criticism of the competence of the secondary school graduates is not limited to writing skills. Though not as widespread, there was

dissatisfaction expressed regarding typing speed and accuracy. This showed up particularly in those few jobs where typing is a major task. It is not clear whether the deficiencies noted among typists are a problem of training, or whether typing is a skill that deteriorates and must therefore be restored by enthusiastic practice.

The testing of candidates for office jobs is concentrated largely on the typing test. These are standard tests for speed and accuracy. In the area of mathematics the testing was much more casual. In the case of jobs where mathematics was required, the student's academic record would be consulted, or the candidate might be asked whether he liked mathematics. Testing for other qualifications such as literacy or general suitability for office work was either totally lacking or casual. It appeared that employers were making little and progressively less use of such testing procedures.

In summary, the office jobs generated most of the white collar jobs for secondary school students in our study. These were overwhelmingly jobs for girls. Most of the jobs are tailored to the students who have embarked on the commercial courses in the secondary school. Employers typically expressed dissatisfaction with the skills in written work, and to a lesser degree with typing skills. Although they used tests for the competence in typing, the employers made little effort to screen formally for language skills and general suitability for office work. Moreover while they expressed concern over shortcomings in spelling and grammar these areas of difficulty seemed to be shared by managers and supervisors as well as the office workers.

TEXTILES MANUFACTURING

The textile industry (clothing and the basic processes) is very largely a feminine work world. In the clothing field, the main occupations are sewing machine operators and pressers. In the yarn finishing and similar plants one finds knitters, loopers,

winders, rulers, spinners, twisters, carders, and stampers. In general, these occupations are machine-tending occupations that require little in the way of skill or training for the job.

The interviews with students located four who were working in the manufacturing of textiles and clothing. One was a very competent grade thirteen graduate, who decided to forego college to take an extremely monotonous job handling wool. Her purpose was to help her fiancé save for a house, appliances, car, etc. The others resemble the office workers.

H.F. works in a plant making head gear. He did not graduate from secondary school, but left at age sixteen when his father told him to find a job. He acquired two credits in English and two in mathematics:

Grade nine was basically reading and answering questions. I never really had any composition type thing either year. My grades were C. In grade nine I did crossword puzzles. I didn't get along with the teachers, and I got expelled for not attending. Anyway, I was learning the same things as in elementary school. And I wanted to be a truck mechanic like my father.

The mathematics was just basic - the same as in elementary school. I didn't take anything new. My younger brother, who was in grade eleven could do the same work. I got a B, there was no problems. The last term I had a part-time job. It came to forty-eight hours a week. I just didn't bother going into school.

At the job, I stretch hats that shrunk too much. It's a manual machine. You don't need any skills. An experienced worker watched me for the first few hours. There's not much reading. You have to read the size ticket on the hats. And you don't write much...just mark down the lot number, and how many dozen there is, and fill out your time card.

H.F. would like to leave. He wants to learn enough about the basics of cars so that he could drive a towing truck for a friend.

E.R. left secondary school part way through grade eleven. After working a while she returned to complete it. She is now employed as an assistant spinner, but hopes to complete grade twelve and proceed to college:

I have three credits in English. Grade nine and ten were the same. We read books and short stories. There was grammar once in a while. In grade eleven I only wrote one essay. I got good marks (seventy to eighty-nine per cent) but had trouble with grammar and spelling. I failed grammar in both seven and eight. Looking back I would have liked to have had more grammar. But in high school it was literature.

I took mathematics for three years, but just skimmed through at first. In grade seven and eight the new math came out. I had to learn it all in one year, and just didn't catch on.

Spinning is a boring job. I look after sixty bobbins on a machine, and help in weighing. There's no reading to do and writing except weighing up the trucks. The job needs no skills. I try to think of other things, the job is so boring. I keep a math book at home and go over it once in a while.

I want to get back to school, and take a course that will get me into something other than factory work.

E.R. worked for twenty months in the midst of her grade eleven work:

When I went back I found the kids immature.

These cases dramatize the meagre academic requirements of the jobs in this field. They also indicate some of the massive difficulties that face the young person who decides to return to his studies. In these cases, the weight of family is against one; the lack of money is likewise; one's inherited habits of

study are a hazard; and the step is in effect one back from adulthood into the world of childhood.

How far do these jobs require the basic skills generated in the school system? There is no need for mathematical skills in the general run of jobs. One might add that very little in the way of general intelligence is required in jobs that are largely automated. Writing skills are rarely brought into play in the course of much work. Some employers require applicants to be able to read and write English, while many others would accept workers "if they could breathe, walk, and talk".

The production jobs in textiles are filled in large part, in Albertown, by people who have migrated relatively recently to the Canadian scene. Such workers, in general, have low levels of formal education and in many cases have only a rudimentary knowledge of English. Their ability to hold such jobs successfully is clear evidence that the work demands extremely little in the way of formal schooling.

Many of the employers in this field were more than willing to accept the "slow learners" of the school system and those who would generally be considered to need remedial training. The employers saw an important adaptation between the quality of the worker and the level of labour turnover. Most of the companies reported turnover rates in excess of one hundred per cent. In their eyes, the failure in the school system was more likely, in this industry, to be a stable worker than was the student who performed well in secondary school.

The testing and screening of applicants in this field is a very rudimentary matter. Since these are manual jobs a major requirement is manual dexterity. In most cases, supervisors carried out an informal test by looking at the applicant's hands. In one plant, the manager requests the Manpower office to administer a finger dexterity test to applicants for sewing machine jobs.

Mathematics is insufficiently consequential in these jobs to warrant testing. The only application of mathematics would be the simple addition required for totalling production. Similarly, the need to write

nothing more than simple numbers indicates the unimportance of writing in such jobs. Nonetheless, the supervisors noted frequent errors in production records, and they reported frequent spelling errors on the application forms of many of their workers.

The above comments on basic skills apply to recent migrants, for whom English is a second language, and to the Ontario school drop-outs who are valued for their stability as workers. Employers were using no sophisticated testing procedures to eliminate applicants who were deficient in basic skills.

As noted above, this is an industry field with high labour turnover in Albertown. It is also one of the poorly paid sectors of the manufacturing world. The combination of repetitive work, low wages, unattractive working conditions, and unskilled tasks tended to deflect secondary school students from such jobs. While they were not rejected by employers, as in two of the fields of work reported earlier, they tended to avoid this as a field of employment.

OTHER MANUFACTURING

In this general area, the possible openings for secondary school students are mainly for boys, and are predominantly semi-skilled and unskilled jobs. Blue collar jobs in this area are by far the largest set of openings for boys in Albertown. There are some technical sorts of jobs too, which require the worker to develop skills through an apprenticeship arrangement, but these are a very minor fragment of the total employment in production jobs.

The available openings, therefore, are of two sorts. At the one end of the scale, the employer is seeking workers with substantial skills, and is only satisfied with workers who have mastered these. In effect, he wants experienced workers. In some cases he may be shouldering some of the responsibility for training such workers by maintaining an apprentice training programme, but in Albertown this was not much in evidence. Only four of the twenty firms interviewed in these branches of manufacturing had such programmes.

Moreover, they can each accommodate only one or two candidates per year. Hence, access into the skilled trades by students of the secondary schools is a very limited matter. And for these few openings the employers can choose the very small numbers from a relatively large pool of students.

The substantial body of the rest of the jobs in general manufacturing in Albertown can be characterized as semi-skilled and unskilled. For some jobs physical strength is considered important. In these, male applicants are at an advantage. Some machines require right-handed workers; others require workers of a specified height range. In some jobs, manual dexterity is a prime qualification. By and large, the fundamental requirements are satisfactory health and physical condition. The medical examination is therefore the major test applied to applicants for such jobs.

In the selection of new workers, academic achievement is a very minor consideration. There are no arbitrary educational qualifications. Whereas increasing numbers of secondary school graduates are reported to be applying, students are accepted who have dropped out of school from grades nine to eleven. Indeed the drop-outs, especially from the technical courses in secondary schools, seem to be preferred in the sense that they turn out to be more stable workers than do the school graduates. And of course both categories are considered less desirable than are workers with experience. Moreover, those experienced workers with a family to support are viewed, by these employers in Albertown, as the most desirable applicants for such jobs.

How does the visage of jobs in manufacturing appear in the eyes of the student turned worker, and how does he, retrospectively, view his training in the basic skills in English and mathematics? The survey of students encountered twenty-four who had entered this part of the labour force.

Those interviewed were mostly male. Three girls were included. They had apparently been forced into remunerative employment because of family need or an

illegitimate child to support. Their jobs were the conventionally masculine sort.

The boys were almost all nineteen-year olds. Almost without exception they had mediocre records in English and mathematics in secondary school. Almost all had carried part-time jobs or weekend jobs while at school, as well as summer jobs. Part-time jobs of twenty hours a week were common, with some reaching the forty hour level.

Of these boys, only two or three reflected a strong positive interest in their jobs. For them the work world was the "real" world. In the words of one, "School stunk". At work they now found themselves in a man's world, using their hands and their brains, pitting themselves triumphantly against "timed" jobs that challenged them. In their eyes, the school atmosphere of "working at your own speed at your own level" was a sickly escape from real life.

The majority of the workers were much less committed to their jobs. They saw the job mainly in terms of a pay cheque. For most of them the present job was a holding operation. It provided an income while they toyed with notions of apprenticeship, or entrepreneurship, or college, or university. Of these, four had gone beyond the consideration stage and were attempting steps to embark on a career in non-factory work.

Regardless of the differences in career orientations of these students, many of their experiences of the work world were highly uniform. The jobs required extremely little of anything from the secondary school curriculum. Indeed, some students found themselves demonstrating their jobs to a migrant newly arrived in Canada. Very serious deficiencies in their accomplishments in secondary school proved to be no hindrance in their factory jobs.

M.Y. completed two years of secondary school and then found a job at seventeen as a welder. His two brothers are also working. His father quit work; he found it too hard. M.Y.'s education took place in the separate system:

I had to take English in grade nine and ten. It wasn't compulsory, but we were more or less told to. We studied novels and a little bit of poetry. There was a lot of grammar. I wished there had been more literature. In both courses I passed with sixty-five per cent. By the time I started nine I'd made up my mind to quit.

I didn't want to take math, but they said you'd better whether you want to or not. I got one credit in math. Grade ten was algebra and square roots and a lot of reviewing of grade nine. Grade nine was remedial math and that was mostly review of grade eight. In grade eight I slept in math classes. I passed the remedial, but grade ten was confusing. I always had problems in math, ever since grade one. Couldn't understand it in grades one to three. So I failed it every year. But it was the only one I failed every year.

I had a part-time job - six to nine each night at a gas station... sometimes on weekends. I didn't like the way things were going. The teacher was on my back and I was trying to do homework at the gas station. Then I went up to Manpower and saw this job as welder on the board. I did welding two years at school. I may apply to go to a course at the College on welding.

I work on axles. Make two welds and pass it on. It's production work. If the quota is finished early you can clean up and hide for an hour. You don't do much reading. Just read the number of the parts on the box so you get the right one.

And you don't have to write. You fill out a card for the hours worked. And fill out a card for the number of plates you welded. There's an automatic counter.

You have to add up the number of plates you weld. So you do adding. And subtraction too. You subtract some if a friend is away, and count it in for him.

Now I'm in charge of three other workers. I'm the lead-hand welder... show the new person what to do.

Where do I go from here? For the next ten years I may stay with it. After that may go on U.I.C. for all I know. Or I may be in charge of more people doing welding.

In four years I'll be getting seven dollars an hour. Now it's five dollars and twenty-five cents. There are no worries at work. It's not like school; everything is cool. I don't regret leaving school. We weren't meant for each other. At school it was hard to get up for classes. Now I don't mind getting to work mornings at seven. I do what I want to do. I'm out to please myself, not anyone else. In eight months I've been late twice, and only sick four days.

At age seventeen this lad has moved from being an academic drop-out to a well paid employee in charge of three other workers. He has managed to salvage a career from the technical skills he learned in secondary school.

E.L. finished grade twelve and then got a chance to apprentice in motor mechanics. He wanted to drop English but his parents refused to sign the forms. Now he favours more compulsory courses:

I didn't like English that much. I did most of the work, but had to write a grade ten exam because I didn't do all the book reports. In grade nine and ten we spent quite a bit of time on writing skills. In eleven and twelve it was novels and short stories and film-making and magazines and media. I didn't like writing. Reading's a lot easier.

I got three credits for math. The grade nine course was Remedial, adding, subtracting and problems. I wasn't too good in math in twelve and thirteen, just passed by the skin of my teeth. But I wasn't interested and didn't try then. In high school I got sixty to seventy in math after the first year (Remedial). The teachers were not that hard on you.

I had a part-time job for three and one-half years, pumping gas at a gas station. That took twenty-five hours a week. I kept thinking of taking a course in forest technology. But I'd have to go back and pick up physics and chemistry. My neighbour got me a job as an apprentice mechanic. Now I do minor repairs. You have to be good with your hands, and keep your cool.

You don't have to read much. There are work manuals on maintenance operations. But I watch the others. You learn more if you don't look at the book. There are some parts, like wiring, that have to be right.

And there is no writing. When I go back for the eight week course there'll be some, but hardly any math. You add up the hours and fill out the punch card. There'll be more writing in the course.

In this case, the student is making scant use of his academic work. He seems to have mounted an effective work career on the basis of his part-time job.

E.A. completed grade thirteen. Now he has a job as a machine operator in the factory where his father works. He could not find a full-time job, so he has interspersed the work with a year at university. His education was carried on in the separate system. Both the teachers and the parents encouraged him to pursue his education:

I have five credits in English. I can't remember any grammar or composition in high school. In grade thirteen we did Canadian literature. But I can't remember what we did in grade eleven and twelve.

My marks in English were average, about sixty per cent. No, I didn't read the novels. Used Cole's notes. And I discussed things with other students. One of the reasons I didn't get all the work done is I'm a slow reader. The teachers didn't help much with grammar and spelling. They stayed away as far as they could. We didn't lose marks.

I had a lot of trouble with maths... an average of fifty-five per cent in all my grades. I needed more time and help. There was only fifteen minutes in a period for questions. I couldn't pick up a whole lesson in one period.

While I was in high school I had a job in a clothing store. That was nineteen hours a week. I

only needed enough math to make change. During each summer I worked in this factory as a winder. I've been here five times now. The job was easy to learn. It took eight hours to learn the job, but I was winding after the first four hours. Another worker was with me the first week. I can now run ten winders in the shop. You have to work carefully. I work about forty-two hours a week, but its mostly sitting-down work. You don't really need to be able to read, just read the numbers.

Last fall I went to university (out of town). I registered in physical education. I took six courses. That was twenty-five hours a week in classes and about an hour a day studying. I spent a lot of time memorizing things. In anatomy and physiology there was just a text book. And one for geography (climatology), but I couldn't understand it. In the electives you didn't need to read so carefully. In sociology you could talk around things. I didn't read all of the assigned materials, but I suffered on exams and in discussion.

The secondary school must have prepared me adequately because I passed first year university. But I would have liked to be prepared better. There was a lot of math in first term geography. I only got forty-five per cent in that term. There was no math in any of the other courses.

I'm going to switch courses this fall. I've applied to admissions to University X instead of the one I went to last fall. If I go back this fall I think I'll switch to sociology. I can be a phys. ed. teacher with only twelve units, or three courses.

At the factory, I would never think about the job after I left work. At University I was always worrying because there was so much to do.

In spite of his shaky academic record, E.A. has survived a year in university. His career so far is one of ambiguity. He can fit in admirably in the factory situation. He is uncertain about his ability to meet the standards of the university. Perhaps they will be less onerous at Albertown University, and in sociology.

His family and secondary school teachers have provided encouragement to date, and he seems to have discovered the chinks in the university's armour.

These workers aptly mirror the interface between secondary school and industry. There is much variety among them. Not all are ready to commit their lives to a job in industry. To a very large degree, these young people have entered the work world through part-time jobs gained by personal initiative or the help of friends and relatives. The school has played an insignificant role in providing a foothold for them in industry and has endowed them with few skills to employ there.

The interviews with students reinforce the data supplied by the employers. The training for these jobs in manufacturing is generally brief. In some cases, the worker can learn all that is necessary in his first hour on the job. The tools of the trade of the cleaner are very elementary; the skills required to use them are soon acquired. Other jobs require more training, but few require more than a week. There are distinctive jobs where the worker will still be acquiring new competence for as much as a year. But these are the notable exceptions.

In many cases, therefore, the employer is constrained to accept the totally untrained and inexperienced worker and set him at the job. As noted above, the employer is generally satisfied with the most elementary academic skills on the part of applicants. However, there are other specific qualifications of a non-academic and non-technical sort that may rank high in the mind of the employer, such as: is the worker conscientious, hard working, punctual, able to absorb orders quickly and comfortably, physically fit, and willing to learn? But these are not specific objectives of the secondary school system.

By and large, it is obvious that the basic academic skills that students bring are more than adequate to the tasks to be performed. Not one of the twenty employers questioned was dissatisfied with the mathematics and language skills of new applicants. Mathematics plays a minuscule role in the unskilled and

semi-skilled jobs. Moreover, whatever training occurs follows strictly the oral route. There are no manuals or instruction booklets to master. However, the lack of criticism of students regarding these basic skills is not satisfactory evidence that the skills are themselves of a high order. The application forms of student applicants are eloquent testimony to the deficiencies in spelling of the job applicants.

It should be noted that there are great differences among the twenty employers in terms of their access to adequately qualified job applicants. Some of the firms are so small and so little known locally that they feel the need to advertise for new employees. Others are so well known, and their wage scales and work conditions so well recognized, that they face a continuous stream of walk-in applicants. One of these better known employers reports fifty to sixty applicants per month coming of their own volition. The very best known employers face a veritable flood of applications for jobs. They are able to stipulate that all applicants appear at the Manpower office for a prescreening according to the employer's established guidelines before they will be considered. In brief, the employers with the most demanding requirements manage to secure the best qualified prospects among the job applicants.

All in all, these employers do not select in terms of academic qualifications or achievements. Nor do they select in terms of skills specific to industrial work. In a few cases, special tests are employed, such as one for colour blindness where colour recognition is an important component in the tasks. More basic, in the eyes of the employers and supervisors, are consequential items that are difficult to test directly, such as attitudes toward work and the established work habits of the applicant.

OVERALL PATTERNS OF DEMAND FOR BASIC SKILLS

Do the Albertown employers see those skills cultivated by the school curricula as related to their demands upon new workers? In a survey carried out by

the Albertain Chamber of Commerce, more than eighty per cent of all local employers stated that they made no use whatsoever of academic transcripts available from the schools. Their lack of interest in the school performance of prospective employees testifies to a minimal concern for academic skills.

In our questionnaire survey of recent secondary leavers and graduates, we encountered two hundred and thirty-three young people who had entered the work world directly from school. When asked about their use of basic skills on the job, this cohort showed some variability by employment sector and by skills (see Table XI).

In terms of overall skill usage, we find clear support for the contention that oral skills - talking and listening - are more in demand than the conventional "three R's". Moreover, there is evidence here of that minimal utility of mathematical skills which our interviewing had already uncovered. Despite continuing popular belief in the necessity of such capabilities for technical or commercial employment, these were the skills least utilized on the job. In terms of variability across employment sectors, the enhanced usage of writing and reading skills in the clerical and stenographic fields, and the mild comparative increase in the employment of mathematical capabilities for textile labourers are among the most pronounced patterns.

What will be most evident is the relative weakness of the overall relationships between usage patterns and occupational sectors. The proportion of explained variation in our criterion variable was consistently below twenty-five per cent. There are two reasons for this. First, the uniformly low level of skill demands across all those occupations open to the high school applicant implies a minimum of variation arising from this source. Secondly, we have already observed in the schools the wide range of factors influencing skill proficiency levels, and the direct route by which such variability in attainment affects usage. Those who lack skill competency find workable alternatives in coping with school or employment. Usage, then, will predictably respond to individual, career and school

Table XI

BASIC USAGE DEVIATION SCORES* BY SKILL AREA BY
EMPLOYMENT SECTOR

(low score = high usage)

(N = 233)

Basic Skill Area

Employment Area:	N	Read	Writ.	Math	Talk	List
Labourers - Textile (17)		.72	.78	.23	.73	.70
Lbr.-Const-Mfg-Mach. (91)		.60	.44	.50	.19	.05
Stock-Sales-Cashiers (26)		-.37	-.30	-.62	-.17	-.09
Farm Man.-Electrical (9)		.15	.21	-.43	-.55	-.45
Cleric.-Steno-Teller (76)		-.64	-.47	-.22	-.12	-.04
Manag.-Fore.-Tech. (14)		-.73	-.86	-.87	-.83	-.54
Grand Mean (233)		2.52	2.57	2.66	2.33	1.98
Beta		.47	.40	.35	.29	.25
Multiple R SQRD		.22	.16	.12	.08	.06

*Group means expressed as deviations from the Grand Mean

experience factors largely independent of the work setting.

In general, the cohort questionnaire data confirmed those usage patterns elucidated by our interviews, although such an inference must remain both limited and guarded, due to the presence of very small numbers of respondents in particular categories.

SUMMARY

This chapter has documented the experience of employers and secondary school students as each has sought to make use of the other. In so doing, it has focussed on five distinguishable segments of the work world in Albertown. Some of the conclusions are well established truisms. For example, the work world is a highly specialized realm, and the distinctive segments hold very different anticipations of what to expect in a new recruit. The ancient polarity between masculine and feminine jobs is a hardy feature of employment. People who are young face a double hazard: they are penalized for being young and immature, and also for their lack of experience when they seek employment.

The range of job opportunities for the secondary school students is narrow. In the banks they are effectively precluded because they have hordes of competitors who have more formal education and particularly more experience than the students possess. In retail trade they lack the maturity and experience that can usually be found in other categories of applicants. In textile manufacturing the jobs are poorly paid, working conditions are unattractive, and the jobs are repetitive to the utmost degree. Moreover, by custom, most of these jobs are monopolized by women. And in effect they can be filled by unskilled migrants recently arrived in this country.

For the boys, the main source of jobs is in the other branches of manufacturing. In general, these jobs are repetitive; they are considered boring; they are dirty; and they tax only the most elementary skills of the worker. Their redeeming feature is the pay cheque they provide. The rewards of the job lie here;

there are few intrinsic satisfactions to these jobs, at least not in the eyes of the students interviewed.

The major source of jobs for the girl students is in office work. There is a very heavy demand for these jobs, and yet a poor fit between preparedness for the work and the demands of the jobs. It is from this sector that we have frequently heard comments about the deficiencies of students - their ineffectiveness in composition, their haphazard punctuation, their inadequate typing, and their disregard for the conventions of spelling.

Even among these clerical occupations there was extremely little criticism of the qualifications of employees in mathematics. The jobs have been so contrived, and their demands so arranged, that the secondary school students can handle them adequately. It is only in the area of literacy that one hears criticisms of the more substantial deficiencies in matters of spelling and writing. Such blame is usually not laid directly at the doors of the schools; rather, the deficiencies are viewed as a pervasive feature of the culture of the work world. They are shared by new workers, by their supervisors, and indeed by those who employ both.

From these explorations of the work world, one finds very little evidence to support the proposition that employers are handicapped by the fact that employees lack the basic skills that schools are expected to provide. For most of the latter, such efficiencies are inconsequential because mathematics and formal language skills are a minuscule component of most of the jobs we have explored. On the other hand, this finding does not imply that employers are satisfied with their workers. They deplore a whole battery of shortcomings - poor work, low productivity, insubordination, instability, and absenteeism, to name a few. (Herzberg, Fredrick et al. 1959.) Moreover, many see these as worsening conditions. But for these deficiencies, that might readily be attributed to the educators, the employers are not prepared to lay the responsibility on the schools. They see these matters as aspects of the larger society, as conditions that probably bedevil the work of the teacher as much as that of the employer.

Chapter VI

The Post-Secondary Sector

The post-secondary sector of Albertain comprises one university and one College of Applied Arts and Technology. The distinction between these institutions, on paper, is clear. The first emphasizes higher education and training in the recognized professions. The second focuses on training for clerical occupations and for the proliferating technical occupations of a modern society.

In their actual programmes, the two institutions are not sharply separate. The university trains some people who make little use of higher education. The college trains some people who make substantial use of advanced science and other forms of higher learning. Both university and college function as storage bins for students who have not yet decided what to do with themselves (Clark, 1960).

The university and the college are autonomous institutions. They are in the community, but not controlled by it. Moreover, neither has control over the other, nor have they any procedures to coordinate their programmes and policies.

The students who enter the post-secondary sector have, in part, been fashioned by the community influences discussed earlier. They have been funnelled through the various sorts of secondary schools noted in Chapter Four. This chapter will consider their preparedness, in the basic skills, to participate in post-secondary education. It will also explore the ways in which students adjust and adapt to the requirements of post-secondary programmes. Likewise, it will note the ways in which those programmes have in turn adapted to the backgrounds of the students whom they attract.

THE COLLEGE SETTING

The Colleges of Applied Arts and Technology are recent additions to the educational facilities in the Province of Ontario. As is the case with new organizational forms that have grown rapidly, there is a paucity of research to describe their structure and their purposes. There is general consensus on the need for post-secondary institutions that can supplement the sorts of education and training provided by the universities of the Province. They now cover a large part of the Province, and have attracted substantial numbers of students.

As "community" colleges they have been accorded a dual mandate. On the one hand, they are available to the cohorts of students who, after leaving secondary school, wish to continue in the educational stream but do not wish to (or cannot) attend university. On the other hand, they are set up to offer the kinds of education and training deemed necessary by employers of various sorts who want the educational system to generate the type of employee they consider useful to them. The colleges therefore have both a humanistic mandate to give young people the opportunity to continue in the educational stream, and an avowedly vocational mandate to train the sorts of workers needed in many varied places in society.

In our attempt to assess the degree to which secondary students are prepared in basic skills of mathematics and communication to partake in college studies, we have focussed on four major groupings of students. At one level, the college is dealing with professional training. By and large, professional training is usually identified with the university setting. However, a programme in nursing is currently provided by the college, even though nursing resembles the established professions much more than it does the general run of courses which one usually finds in commercial and vocational training institutions. The curriculum, the teaching staff, and the orientation of students, all have a distinctive professional tone (Etzioni, 1969).

Secondly, there is a variety of courses that are directed to clerical workers. Some of these are oriented to general office workers, but some to groups as specialized as "legal" secretaries. The central emphasis in such courses is the acquisition of a set of rather elementary skills which are usable in relatively special sorts of work situations. They belong to the office side of the business world, as contrasted with the personal services provided by the nurses mentioned above. The skills can be acquired more quickly than those involved in nursing. Unlike the nursing skills, there is no codified body of systematized knowledge or theory that the candidates must learn.

A third student body comprises those involved in the traditional trades training courses. Some of their programmes are relatively short, loosely structured affairs. Others are essentially apprenticeship programmes with one or another of the skilled trades, and require much more time. Between these are the technicians courses, briefer and less structured than apprenticeship programmes. In all of these, the accent is on skills and techniques, as opposed to the "book-learning" aspects of nursing. Unlike the clerical training, the student works in the world of physical objects, many of which are dirty, noisy and heavy. By custom, these are traditionally boys' jobs while the clerical, nursing occupations are usually feminine.

The college, like the university, offers humanistic courses, including English and mathematics, that are not directly associated with vocational needs. However, these are usually carried on at a very elementary level. In general, they are a form of upgrading for the student who lacks secondary school credits for admission, though on occasion still more elementary work may be attempted. These courses perform a service function. They are not undertaken because of an intrinsic interest in humanistic studies. They are made available so that students who lack preparation can climb to the level where they can be granted admission to one or another of the vocational courses.

To recapitulate, the college serves a highly varied clientele. At one extreme it accepts students

who lack the basic rudiments of a secondary school education. At the other it takes in students who could flourish in the university. It offers to this wide range of students an equally impressive list of types of courses, some quasi-professional, some clerical, some skilled, some technical, and some that are ancillary to any or all of the above.

It is essential to keep in mind this extensive range of offerings and of students as one inquires as to how well prepared (in mathematics and English) are secondary school students to handle the demands of the courses the college provides.

Secretarial Studies

As noted above, secretarial studies are only one of a great variety of programmes offered by the colleges. Moreover, these are subject to sub-specialization, in order to provide a distinctive type of secretary who can function in business, in medicine, in law, and so on. The teaching, therefore, is in part very specialized while, at the same time, other parts are of a common general nature. The basic skills belong to the common elements in such programmes (U.S. Department of Labour, 1964).

Secretarial training is a two year programme. The essential skills to be learned are shorthand and typing. Once the rudiments are acquired the student has to achieve speed and accuracy. Obviously, such skills are dependent on the basic skills of language. The student will have difficulty in shorthand if she encounters words that lie outside her vocabulary. The typist is limited by her ability to recognize the correct spelling of each word she types.

There are two paths into the secretarial programme. All applicants are expected to have completed the four year programme in secondary school. Some students enter who have made their occupational choice earlier, and have taken courses in typing and shorthand as part of their secondary schooling. Others enter directly from secondary school without skills in these two areas. Those with the skills can usually

proceed directly to the second year of the secretarial programme, though they may need to register for a preliminary summer course at the college.

Both groups of students, therefore, have come directly from the secondary school system. How well prepared are they for the transition to college in terms of basic skills in English and mathematics? The evidence is ambiguous. The coordinator of the secretarial programme asserts that seventy-five per cent of the incoming students are deficient as regards to English. On the other hand, the instructors reduce this figure to about twenty-five per cent. Moreover, they see the problem as one which does not arise with students who have studied shorthand and typing in secondary school. These students, the ones who go directly into the final year of the programme, are considered to be adequately prepared. It is largely among the more heterogeneous group that have elected to avoid the "commercial" courses in secondary school that there are difficulties.

Whatever the actual situation, the instructors indicate that the first year writing course in English is carried on at a remedial level. It attempts nothing more than can be found in the secondary school offerings. However, the achievement of a satisfactory level in English does not rest solely with the writing course. The teacher of typing is hard at work eliminating errors in spelling and grammar, and the teacher of shorthand is expanding the vocabularies of the students. So both of these teachers not only complement the work of the teacher of writing but they also monitor the student's performance in spelling, grammar and vocabulary.

Perhaps this gives a clue as to why the students from commercial courses in secondary school are better prepared in English than are those from the humanistic courses. It seems that the teachers of commercial subjects monitor skills in this field more successfully than do teachers of humanistic subjects.

So although the general incoming students are pronounced, by the staff, to be deficient in grammar, spelling and vocabulary, by the end of the programme they are considered adequate to go forth to jobs in the

community, and beyond. But it should be emphasized that the assessment of students is a complex matter. One measure of success is a satisfied employer, or more pointedly, failure is reflected in an employer who voices his dissatisfaction. As noted earlier, such measures are very elastic. There is a good deal of uncertainty in business offices as to what constitutes adequacy in writing skills. This was noted in such places as the university business offices where standards were far from uniform. Supervisors and managers who themselves have deficiencies in writing skills are uncertain judges of such matters.

By way of summary, with regard to English in the secretarial programme, there is general dissatisfaction with the adequacy of writing skills among entrants. However, this is largely identified with students who had not studied typing and shorthand in secondary school. Moreover, these deficiencies are assessed differently by people at various levels in the secretarial programme.

Hence, it is far from easy to frame an unequivocal assessment of the effectiveness of a course in writing in the college curriculum. Nor is it easy to place a firm evaluation on the degree of preparedness of the students who enter such a course. All the teachers were inclined to criticize the secondary schools for their shortcomings in inculcating basic skills. Not surprisingly, they also thought it desirable that the college should launch remedial courses in English to supplement what they are now trying to accomplish.

With respect to mathematics, there were no reports of serious deficiencies in basic skills. Occasional comments were heard of students who had difficulty in placing decimal points. By and large, the references are only to the most elementary mathematical skills. The bank employees discussed in Chapter Five made extremely little use of mathematics, and the office workers reported even less. It would seem that the whole apparatus of secondary school mathematics has no application in the training of secretaries. Not unexpectedly then, there were no comments about this.

How does the matter of preparedness look through the eyes of the students? We managed eight in-depth

interviews with students in the secretarial programme. As can be seen from the questionnaire in Appendix A, we were able to reconstruct their academic experiences as well as to assess their current efforts to handle courses. The following excerpts from one questionnaire are typical.

E.K. plans to be a medical secretary. She had little interest in her secondary school studies. Her parents, who both work at unskilled jobs, encouraged her to stay in school. While there, she maintained a part-time job that absorbed twenty-three hours per week. The college coordinator of secretarial studies gave a talk at her school and E.K. then decided to enroll at the college:

I took four credits in English. It was required in grade nine and ten. I expected just to learn something from them in eleven and twelve, and I got average marks. But I didn't give them much attention. I sure didn't read all the assigned materials. I was poor in composition. The schools put too much emphasis on literature, There should be more on writing. The teachers in my other classes didn't care about English and grammar.

I got four credits in math, too. I thought these subjects' (Business Mathematics and Accounting) would help. But I wasn't good in math. I had problems. The school tried to help me, but I wasn't interested enough in these subjects to care.

I had a part-time job. But the money wasn't very good. You didn't need to read or write or do any mathematics where I worked. I guess I always wanted to be a secretary. I can do this course and have a part-time job after school, too. The course takes about twenty-five hours a week.

About a third of the time goes in reading. Some of it is secretarial procedure. For psychology I don't do much reading. You can skip over that, and skip over Canadian literature, too. As far as I'm concerned, they are both a waste of time. For the literature you can use Cole's notes. Canadian literature is just an

opinion course - there's no way you can fail something like that.

You don't need any maths for this course. Except to count the spaces to centre a letter.

In high school the English courses were poor. The subject matter wasn't good and the teachers weren't as organized.

E.K. feels competent to complete her programme of studies. She doesn't worry about her chances of success. She notes that she is usually late for classes, and doesn't have to work very hard.

With rare exceptions, the secretarial students performed poorly in secondary school English courses. This was the assessment of their teachers of English. On their own part, they commented on poor teachers who failed to organize work effectively. At this point in their lives they speak vigorously of the shortcomings of their English courses. "The last time I studied grammar was in grade eight". In their English courses, in literature, they were encouraged "to make interesting points". They noted that their other teachers in secondary school made little or no effort to monitor their spelling, grammar, and composition. In general, they see their courses in English in secondary school as having provided a very inadequate foundation for their training as secretaries. The very exceptional student notes that her wide and enthusiastic reading really prepared her to meet a lot of new demands that will come to her in her role in the world of work. But most see themselves as having been short-changed by the efforts of the secondary school to teach English, which they define in a skill dimension.

We may ask, given their handicaps, how do they survive the demands of college work? To a considerable degree they limit their dependence on reading as a basic element in their college courses. They manage this in various ways. They seem to have decided collectively that some work is irrelevant. Hence, they disregard courses such as psychology and sociology as not crucial to their career; in their eyes, poor performance in them cannot be fatal. Similarly, in

their English course they denigrate the literature component and concentrate on basics, such as spelling, grammar, and punctuation. Where they face their major courses they find ways of avoiding or supplementing their reading. They have discovered that teachers in class often dictate notes directly from the text book. This renders careful reading unnecessary. They approach teachers directly for discussion of materials, or exploit classroom time for the same purpose. Alternatively they turn to other students for help in matters they have difficulty in understanding. To a large degree, they have substituted the oral route for the reading route in their learning situations, and have managed collectively to curtail the amount of reading required of them. In this they mirror the comments of staff about having to lower expectations for students in their courses.

Student's reports on their mathematics courses in secondary school indicate clearly that they experienced difficulties in these, but rarely do they attribute these difficulties to the shortcomings of their courses or to the unavailability of help from teachers. Nor have they attempted to avoid mathematics in secondary school. Indeed, they have seemed as willing to attempt the five year stream of courses as they have to use the easier mathematics offerings.

On the other hand, they found little place for mathematics in the secretarial course. The mathematics needed for their accounting course is very slight. When asked to indicate occasions when they used mathematics they reported few. Of those they noted, such as determining the centre of the page for typing, the demand on mathematical competence is meagre indeed. On the other hand, their advanced mathematics courses are no guarantee that they have a grasp of the elementary skills. We encountered students who had studied calculus but could not calculate percentages.

In summary, these students generally had poor academic records in English and mathematics in secondary school. In their eyes the English courses were inadequate in preparing them to write and read. In college they have found ingenious ways of living with their academic handicaps. Students and teachers

have arrived at a *modus vivendi*. Students restrict their efforts in all but their core courses. In general, they do not impose heroic standards on themselves.

The Nursing Programme

This programme leads to the diploma in nursing. The course work extends over two years and by contrast with the secretarial programme is made up of diversified curricula. At the end of the course the students write standardized examinations for the Registered Nursing Association of Ontario, in order to be admitted into practice.

The programmes of nursing training have only recently been transferred from the hospitals, where they were located for decades, into the framework of the colleges. The transfer of the programmes has most often involved the shifting of the nursing teachers from the hospital to the college. In Albertown, students still spend the major part of their time in the hospital setting. The college has therefore inherited not only the teaching staff but also to a marked degree the curriculum and the standards of achievement that had been generated in the past. In other words, the traditions of teaching and learning have been transferred intact, supported by the external examinations which have remained in place.

Unlike many of the other college programmes that are new initiatives, the nursing programme retains its traditional character. It is a programme that is well embedded in the social life of the community. Students know what to expect of it, they have a sense of its standards and they apply in large numbers for the privilege of admission. In this regard, they make the programme a distinctive one.

The large number of applicants permits the programme to be selective with regard to admissions. Traditionally, the nursing programmes could require graduation from the five year programme in secondary school, and still sustain an adequate stream of applicants. In the college situation, there are more

than enough adequately educated applicants to fill places in the programme. For nursing, therefore, the qualifications of the applicants are relatively high. Apparently, motivation to achieve competence in the course is also notable. Hence, it should come as no surprise that there were few or no disparaging comments about the qualifications of such students.

In the eyes of the administrators and other teaching staff, the students in the nursing programme were adequately prepared, handled the course work competently, tackled their work conscientiously, and accepted readily the standards of performance set for nurses in training.

How do these matters look through the eyes of the students themselves? We interviewed thirteen at length, intensively. The nursing students interviewed report a very substantial work week. Two days are spent full-time on the wards. Another day is spent in residence studying nursing theory. On two other days there are college-based courses in sociology, psychology, philosophy as well as biology and the accompanying laboratory period. The students report three to four added hours of work per night. As one noted, "you have to be able to organize time, and you must have an interest or else you would quit". Nursing is an arduous programme of study.

N.T. had a commendable record in secondary school. Her parents both have white collar jobs, and they have encouraged her with their advice:

I took six credits in English. It's important, and I enjoyed it. I got an average of around seventy per cent. All of the teachers included grammar, some a lot. That was the most difficult part for me. I put a lot of time and effort in English, especially in grade thirteen. Besides Canadian literature we spent a lot of time on novels and plays. My best English course was in grade thirteen; it included an education project teaching the retarded.

I was weak in maths in grade eight. The guidance counsellor encouraged me to take the four year math. I didn't find it difficult. There were no real problems.

I didn't have part-time jobs at school. In summer I worked with retarded children. And I volunteered around the hospital. My sister had gone to nursing before me.

In nursing, science is important and so is some English. You need very little math. It's very important to be able to communicate, and you need some personality.

Most of the reading is in the nursing theory part of the course. You have to read carefully for the nursing and for the biology. For sociology and psychology it's different. For other courses I do all the reading on the average. But in sociology and psychology I can manage without reading.

It's nursing that requires most of the writing, too. You have to take a lot of notes. The really important place is the wards. You have to be careful about the writing, about charting, and getting things across correctly.

There's not much math, just a few basics in medication. Medication is a very important part of nursing.

I worry sometimes about all the work to do and the tests coming up. You can't get all the work done. Am I ever late for classes? No, never. And I hardly miss a half a day a month while I'm here. Homework takes about four hours nightly.

N.T. has had a fortunate career to date. The schools provided her with adequate skills. She discovered her vocation early and was given good guidance. Her family provided financial support and encouragement. The nursing programme has challenged her resources without overwhelming her with its demands.

By contrast, M.N. has had a very uneven career. Her academic life has involved a number of perils:

I have six credits in English. Four were straight English courses, mostly novels, short stories, and poetry. The other two were theatre arts. I got

ninety's in them and eighty's in the regular courses. They weren't difficult. I didn't spend much time on them, and did very little homework.

I never had an urge to be a nurse. So I quit school to be an actress. Then I thought of going to university. I just had no definite plans. After I'd worked in a hospital a while I decided to give it a try. It will always be useful - at least it's not a waste of time.

My parents didn't try to pressure me. They left it up to us kids. My mother didn't go to high school. She felt embarrassed about not being able to help her children. But my oldest sister was a real brain, and she kept at me. And the nurses I met were all really nice to me.

I liked theatre arts. In my last year I actually taught a class. But there wasn't enough grammar in my English courses. So my oral grammar is poor. And we had no classes in spelling. Only the history teacher corrected our spelling errors.

After grade nine my maths were a mess. The guidance counsellor stressed the five year maths. I could barely understand logarithms. Even with remedial work I couldn't understand the abstract stuff. Things just went downhill and got worse.

In nursing a lot of the work is independent. You have to force yourself to work or you fall behind. There are a lot of places where you can't be too careful. You have to really concentrate when it's doctor's orders, or nursing notes, or a patient's chart, or drug dosage. It's different with sociology and psychology and philosophy. There it's alright to let your mind wander.

You do some writing in all courses, but in biology and nursing you are writing constantly. The most careful writing is in charting in the hospital. In sociology and psychology and philosophy it's not so important. You can borrow other people's notes. Some students "pair" and then xerox these notes.

I should have taken the basic math. In medication I don't feel confident with fractions and doing division. Then we didn't have any courses offered on the metric system. Math is a problem for me when I

need to use decimals, as in preparing the I.V. drip. Math never comes up in the other courses. When I get under pressure I can't check my work.

You wonder whether it's worth studying nursing when you hear of all the cutbacks. There may not be any jobs. This keeps me worrying a lot. I guess you could say that I just do an average amount of work. But I'm never late for classes. And I never miss classes, at least not nursing or clinical. I skip a few of the sociology and psychology classes.

These two students differ in a substantial number of ways. The similarity that stands out is their recognition of what is consequential in the nursing programme and what can be given minimal attention. In so doing they define which basic skills are consequential for nursing training.

The experiences of students of nursing in secondary school are not very different from those of the secretarial group. Their levels of achievement in mathematics were low. In literature, particularly with respect to their ability to read effectively, they were somewhat superior. In terms of writing skills they reported deficiencies. Moreover, they made approximately the same criticisms of the courses in English, in particularly stressing what they now perceive as their lack of formal instruction in spelling, grammar and composition.

In the light of these evaluations of their backgrounds, how can we account for the almost glowing accounts of teachers and administrators of their effectiveness as students? Many of their adjustments and adaptations resemble those of the secretarial students. They seem to select areas for major effort. For example, they soon come to realize that the writing they do on the ward is very consequential; it must be able to pass inspection. What they do in other contexts is not so important. They aim to write good ward notes and to maintain good patient charts; they do not try to compose good essays.

Like the other students, the nurses sought ways of reducing the amount of reading they must do. For

courses such as psychology and philosophy they found ways of identifying the parts of key importance while they skipped reading the rest. They too found ways of borrowing notes from each other, and getting access to summaries of materials. And as in the case of the secretaries, they found that classes could be transformed into the sorts of discussion groups where the instructor merely imparted the information orally, while the students absorbed it through memorization or rough note-taking.

Where they differed from the secretaries was in the discovery that there were very important bodies of knowledge involved in nursing, both at the practical level and at the level of science (eg. biology), and that their competence as nurses depended very much on being able to read rapidly and effectively in these domains. In so doing, they managed to avoid the discipline of reading in the literacy domain while investing their efforts in another area of reading. These decisions on their part are rational solutions to the situations in which they find themselves.

Unlike the secretaries, the nurses seem to have absorbed a considerable dedication to the standards of work of their adopted field. They responded to our interviews as conscientious and dependable workers. They were punctual for class and very rarely absent. Almost all of their work assignments were handed in on time and they routinely checked the quality and accuracy of their basic academic work. In reaching these standards they were acutely aware of the shift from secondary school.

As a final note, the nursing students have drawn only to a very limited degree upon the skills and bodies of knowledge that the secondary school provided. On the other hand, they have found it necessary to contrive a set of strengths that were largely unavailable in the earlier setting (Ross, 1961).

Technical Occupations

We have attempted to classify the programmes in the college in rough and ready fashion. The nursing

programme is an ancient and readily recognized type of training. Similarly for office work, the training of clerical workers is a widely recognized matter. But in the case of the technical occupations the situation is very different. The occupations themselves are not very well known. While most readers recognize the tasks of the welder, few can fill in adequately the definition of a "Materials Manager", or a "Fluid Power Mechanic". A large proportion of the technical occupations are newcomers to the industrial scene. Furthermore, few of the potential applicants have a dependable notion of the occupation. By contrast, some of our nursing students knew at age five that they wanted to follow that field of work. Such is not the case for the great range of technical occupations. Students hear of them in many cases from the guidance counsellor in the first instance, and start to think of entering them at about the time they are ready to leave secondary school.

Moreover, the programmes of study for the technical courses are a bit novel even to the people who teach them. In many cases the instructor is a mature worker who learned the occupation in a very informal way and who is invited to set up the programme in the college. Of course, it could hardly be otherwise. New teaching programmes for new occupational specialties have to create their own teachers, in a sense. However, many of these instructors have never been engaged in formal teaching; many have had no experience with the subtleties of assessing applicants to such programmes; many have only a very rough notion as to how such material can be incorporated into a curriculum or fitted into a timetable. For them, the programme is still in a somewhat experimental stage, with the accompanying hazards.

Consequently, there is a wide gap between the long established, traditional training programmes discussed so far in this chapter and the kinds of programmes being generated for these new specialized occupations.

Let us return to our central problem - how well prepared, in English and mathematics, are the secondary school students to participate in these programmes of

the college? If we begin at the admission stage it is very clear that an unambiguous statement is not possible. In beginning a programme it is not feasible to define in tidy fashion what is needed by way of an acceptable applicant. Moreover, there is no systematic way of helping a student decide whether or not to enter a programme. Rather the situation is one in which the college says to the student, in effect, "It might be a good choice for you to attempt this programme", and at the same time it says to the instructor, "Why not try to fit this student into your course and see if he can manage it". The situation is one of a good deal of mutual ignorance.

In the early stages of a new programme, it is a relatively unknown entity. To build up a student body the instructors tend to welcome any sort of student. Moreover, the college has an interest in amassing an adequate body of students to launch and sustain such a programme. Both college and instructor are likely to err in the direction of admitting students who later may have difficulties with such a course.

As the course proceeds, the instructor may need to revise downward his expectations of the capacity of students to meet the course requirements. The load of work may be reduced in midstream. The instructor may decide that students can't read two novels during a semester and may settle for one. Or he may decide that he needs to review more of the mathematics and present less new material to the class.

As noted in the other programmes, the students may play a role in determining the amount of work, the level of work, and the pace of work in the course. They may place increasing demands on the instructor for oral assistance, at the cost of his time. The more this happens the less time he has remaining to monitor their work, grade their assignments, and raise the quality of work. When instructor and students arrive at a *modus vivendi*, it probably will be well below the standards the instructor harboured at the beginning of the course. This will, of course, influence the procedures for admitting students into the course in the future.

The students who drop to the lowest level of achievement in a course obviously cannot be sent out into the labour market without discrediting the course. On the other hand, there are lots of slots in the work world where the student with a bit of expertise can be useful to an employer. So the instructor may find himself helping to produce and place in employment a very inadequate product even while he hopes that, in the course of time, his programme can start to generate the sort of technician that he envisaged initially.

One concrete step that the instructor can take is to try to demand higher academic qualifications in those admitted to his course. If a flow of better students is not forthcoming, then he can campaign for some sort of remedial programme to bring the applicants up to the desired standard. Of course, the instructor runs the risk that students, once so qualified, will seek out an alternative programme of study, thus leaving the instructor without the expected improved kind of applicant.

The students selected into these courses were reported to have had mediocre secondary school records. We were told that they had avoided English and mathematics in their secondary school courses. In this they differ from the applicants for nursing and secretarial work. However, the technical students seem to reject efforts to get them to develop facility in using these skills as part of their programme. It will be recalled that the nurses accepted this requirement with relative enthusiasm so that they could handle the science aspect of nursing. In secretarial work there was a more grudging readiness of students to make efforts at reading and writing. The Technical students come close to rejecting these matters. In part, they see these as irrelevant to their work as welders, mechanics, etc. For the record, it would seem that some of the teachers who were helping them with the more practical aspects of the work shared their negative evaluations of the need to develop language and mathematics skills. While the nursing and secretarial students faced a united front among their instructors,, on the relevance of reading and writing skills, the technical students met some instructors who

were not only deficient in these matters but who showed little concern for the "frills" of the programme.

This foray into the college segment of the post-secondary world does not yield any simple generalizations or recommendations. In conclusion, one can, however, raise five questions that help bring some order into the discussion.

First, was there ever a Golden Age in which all the students coming from the secondary schools read, spoke, and wrote well? Our conclusions are that deficiencies in these skills have a long history, and that many of the current, successful members of society (including employers, supervisors, teachers and academic administrators) pay only lip service to high standards in matters of literacy and numeracy. The lack of polished skills in these areas has not prevented the pillars of industry, commerce, government, health, and education from carrying on their respective types of work.

Are teachers in the college appalled at the current crop of secondary students? Generally, yes. Are they paralysed by their deficiencies? The answer is, no. At all levels in the system they seem to be accepting them for their courses and generally reaching out for more.

Are the students crippled by their deficiencies? In general, they are very aware of these. But the awareness does not lead to a sense of impotence. Teachers scold them about the deficiencies. Students, on their part, devise stratagems for dealing with serious deficiencies. They deflect the instructor into using oral instruction; they manage collectively to reduce the amount of reading and writing required; they borrow help from one another; they discover what the instructors believe is "really important" and learn to deal casually with the rest.

Are teachers adapting their standards to those of the students? To a considerable degree, yes. Typically, they "accept the student where he is, and do what they can to help him move ahead". They come to accept that the student quickly forgets what the secondary school teacher has tried to teach. They find it necessary to review the essentials that precede

their course content. In many cases, they work heroically with students to help them reach an acceptable level of competence. In so doing, they learn to sacrifice the little luxuries of scholarly excellence in order to achieve the elementary goals of the course they are teaching. We have noted that teachers have largely substituted oral communication for written communication with their students. Instructions are oral, not written. In so handling this matter, instructors absolve students of the need to follow written materials; they thereby reduce the students' dependence on, and ability to utilize the written word.

Are employers concerned about the product of the system? We have few data, but little evidence of distress except for the employers of clerical workers. These employers, like those discussed in Chapter Five, seem to have adapted to the qualifications of the workers coming for employment. By making the calculator and the dictionary available, and by a judicious use of the academic skills of a few, the business offices seem to carry on with little critical comment about deficiencies of employees.

THE UNIVERSITY SETTING

As noted earlier, our probing of the university world was a very modest venture. It was a small excursion into a largely unexplored part of society. In spite of the size of the university enterprise in Ontario, in spite of its costliness, we lack any serious effort by social sciences to describe and explain how these institutions are organized or how they function. We have financial accounts of their activities, and numerous other administrative reports, but nothing that can be called a systematic case study of a university.

The studies we have available are decidedly piecemeal affairs. "Who Doesn't Get to University and Why" (Pike, 1970) limits its interest to the social background of students. "The Queen's English" (Norman, 1976) reveals much about one small facet of university

life, i.e. the performances in English of students in the examination setting. Many more studies are needed in order to derive a comprehension of the universities as going concerns.

It is useful to point out some of their general features, such as size (student bodies over 10,000 are common), the differentiation into faculties, which are themselves subdivided into departments, (which are in many cases congeries of fissioning fields), as well as the geographical spread of the candidates who apply for admission.

For purposes of our study, it was clear that Albertown provided only a minute fraction of the student body of the university, approximately one in thirty. Moreover, there was no way of securing from the teaching staff their assessments of the preparedness in English and mathematics of those students who went to school in Albertown. When we attempted to contact these students, seventeen volunteered to make themselves and their time available, and these were interviewed at length.

Before discussing the experiences of these students in their university life, it is useful to consider the ways in which the university teaching staff evaluate the preparedness of students in English and mathematics, and also the ways they adapt their teaching and testing procedures to the students.

A casual sampling of faculty elicits the comment that the present student body is deplorably deficient in language skills. If one raises questions about the standards of earlier generations of students, there is usually a recognition that there have always been students at university whose competence in English was inadequate. For purposes of this discussion, however, university teachers seem to carry with them a picture of an "ideal" student, one who is totally equipped to tackle the novel experiences that the teacher has planned for him. This ideal student is one who has mastered very adequately the curriculum of the secondary school and is assumed to bring with him an impeccable background plus a ready-made motivation to plunge into the course the instructor offers.

Clearly, this is a caricature of the real student. The university teacher eventually comes to terms with the specific deficiencies of specific students, but he still permits himself the luxury of contrasting the student of today with the ideal of what a student should be.

It appears that the concrete assessment of student preparedness in English and Mathematics is not a matter of key concern to faculty. The more salient features of their concerns are of a different order. Academics are not all great pedagogues; their major concern is to maintain mastery over their own subject matter, which is frequently a changing phenomenon. In a fundamental way, the response of faculty to student competence in the basic skills is embedded in their selection of teaching materials, their choices of testing procedures, and their selection of teaching methods. Eventually all three of these reflect the competencies of the general run of students.

The existence of large classes seems bound up with distinctive testing schemes. The ones that are most attractive are those that reduce the amount of reading to be done by the instructor. The optimum examination is one in which a computer scores the examination, and the instructor is presented with the antiseptic results. This sort of testing procedure may eliminate all writing for the student, the digits on his identification card excepted.

The large classes tend to isolate the student from the instructor, who is replaced in large part by the teaching assistant. Insofar as the latter is responsible for "discussion groups" the student is partially absolved from reading and writing, and is encouraged to follow the oral route to learning. Whether this is a productive use of time is not at issue here. The consequential point is that the organization of the course deflects the student from reading and writing.

A variant of this occurs where the instructor attempts to impose a more systematic pattern in the discussion groups by keying them to specific analytical problems raised in the text materials for the course. For a variety of fields of study the text book

publishers provide a student work book that concentrates attention on specific units of the course. While this gives a focus to the study period, it also has the side effect of atomizing the reading, and simplifying it to the point where the demands on the reader are minimal. Many teachers complain that the students cannot follow and recapitulate a sustained argument as found in conventional theoretical writing. These classroom procedures avert these difficulties for the student, but this happens at some cost. In some courses the student gains academic credit by exercising scholarly skills of a very modest sort. When students say of a course that it is "common sense", or that the classroom materials are "garbage", they are often reflecting the ways in which the academic exercise has been organized.

We have noted elsewhere that the lecture plays an important role in education. It undoubtedly has a place in any scheme of learning, but preferably as an adjunct to more independent efforts by the student. However, the student who is weak in reading and writing may so lean on the lecture procedure that the instructor utilizes it to an even greater degree. The student who initiates discussion in class, and in particular initiates review of materials he does not understand, constrains the teacher to put emphasis on oral teaching at the expense of demanding reading and writing from the student.

Hence, to the question, "Are student skills in basic English and mathematics adequate for their university work?", the response seems to be that these skills are embedded in a context of teaching methods, teaching materials, testing procedures and course organization of which they are a part, but only a minor part. Their effect cannot be readily isolated from the larger matrix.

How does the matter of the preparedness of students appear in the eyes of the two parts of the university that are intrinsically involved, that is, the faculty in English and Mathematics? In general, one hears two differing accounts. Within these departments the quality of their "own" students, those taking an honours programme in the discipline, is described as

adequate. They are well prepared to pursue careers in the discipline. However, for the general run of students their preparedness in English and mathematics is reported as "deplorable"(1). One notes, here, a tendency to see that one's own discipline is carrying the flag successfully, while those around are in a perilous state.

Although the Department of English in the Albertain University provides no remedial courses for those whose preparedness is questionable, it does provide a special course for the students in science aimed in large part to help them to handle the basic requirements of their professional courses. The assessment of the need of the students for help in English is based on diagnostic tests. Several hundred students per year are involved. On the test, they sort themselves in a manner that indicates about ten per cent are not really in need of such a course. Another ten per cent would be classified as non-literate. The latter appear to have suffered a life-long deficiency in grammar, spelling, choice of idiom, etc. They are seriously lacking in the basic skills in English. The rest (eighty per cent) seem capable of improving their skills.

Although these students have presumably all graduated from the five year stream, very few have studied English in their final year. This would be expected since they are mainly in the "hard" science areas and related professions. Their deficiencies are not those of literature, but simply the basic skills needed to handle science courses, ie. the ability to read competently and to perform modestly in writing laboratory reports and similar assignments.

According to the coordinator of the course, the students work assiduously. They seem to be serious about their careers, at least as far as getting credit for their work in their English course.

(1) See, for example, the brief from the Association of Canadian University Teachers of English, (undated).

The teaching staff aims to have the students do a substantial amount of writing, some of it brief items, and some essays in the two thousand word range. Where they are seriously inadequate the items may be rewritten by the student. The instructors and assistants spend a lot of their time giving personalized attention to students' difficulties.

Since the enrolment is large and relatively anonymous, there is always the likelihood of plagiarism. This is almost impossible to detect. On the other hand, there is frequently a suspiciously wide gap between the quality of work written in class and that done outside. Since only original work has relevance for the course, there is a tendency to demand that more and more of the writing be done in class and under supervision. This reduces the amount that the student can manage to write. More significantly, the relation of teacher to student shifts from one of a sympathetic helper to one of a policing supervisor. Although sophisticated teachers may be able to sustain this relationship, the teaching assistants find the tension difficult to endure. Hence the atmosphere of the class in English shifts from one of the pursuit of a humanistic skill to a traditional "staff-inmate" sort of relationship. In brief, the effort to improve skills in basic English has been conceived as a cooperative venture, but it turns into a struggle for marks on the part of the students.

How effective is the programme? Very few fail. How many could proceed to another English course at a higher level? The estimate is about ten per cent. In the eyes of the instructors, there is only a modest result from their teaching efforts. And they are left wondering whether the students actually use their improved skills in their daily work, or merely adopt them for purposes of passing the course. But here we touch on one of the uncomfortable questions of academic life. Which courses are genuinely germane to the career of the student, and which are rituals that are devised as appropriate ordeals for the student who has chosen a career? We found out nothing about how the students actually made use of their freshly acquired skills in English.

A similar inquiry can be directed to the second basic skill. How did matters stand in the field of mathematics (Gold, 1975)? How well prepared were the students to handle the demands of university courses? As noted earlier, most of the students interviewed seemed well satisfied with their secondary school training in mathematics. In the few cases of inadequacy, the blame was usually shouldered by the students. They rated as more than satisfactory the courses in Mathematics in secondary school. Furthermore, we heard no criticism of the mathematical skills of the students who had gone to employment. The comments there had to do only with the low level of mathematical skill required in the segment of the work world that we explored.

Hence, we were unprepared to learn that the incoming students, in the introductory mathematics course, were considered mediocre in this subject. In the words of one of the faculty, "This is a mathematical horror story". Not only was there a conviction that students were poorly prepared, but there was another that the deterioration had gone on for most of the past decade.

The measuring stick and the stumbling block for students in the university is the introductory course in calculus. This is a requirement for many of the science programmes. The student must complete it satisfactorily in order to graduate. However, there is an anomaly here. Although the course is offered in the first year, students from other years may write the examination for credit. Indeed, a student is permitted to try the examination on no fewer than four occasions. Hence, a student could write the examination at about his time of graduation. Presumably the course would have little functional importance to the student if he failed to master it before his final year. Does the course therefore have some of the earmarks of a ritual, something required by science programmes to ensure academic respectability in the programme? This is the question raised earlier with respect to the course in English. On the other hand, the failure for this course, unlike that for the English course, is relatively high.

What is the evidence that the students are more poorly prepared than previously? The evidence is that the course in calculus is reported to cover progressively less territory as the years go along. Work once handled readily in the first term is now postponed to the second. More evidence of the inadequate preparation of students comes from diagnostic tests. The one used most recently on the incoming students revealed serious deficiencies. Tests were applied to approximately one thousand two hundred students registered in their first year for calculus. About twenty-five per cent of these were unable to solve a pair of equations with two variables. When asked to derive the roots of a quadratic equation fewer than twenty-five per cent of the students were able to perform the calculation accurately. This is the level of mathematical illiteracy that elicits the comment about a mathematical horror story.

How do mathematics instructors deal with students who are inadequately prepared? One successful device is to use audio-visual materials. The student can listen while the voice of the instructor repeats endlessly the oral instruction that accompanies the step by step solution of mathematical problems. This adaptation brings us around once more to the ways in which the student shifts over to the oral mode of learning.

The University Student

The students from the community who attended university exhibited very different backgrounds in mathematics and in English from those who attended college or who went off to jobs. Their records generally showed more than adequate standing. Most of them reported grades of B or better for most of their work in these two subjects.

Of the students interviewed, seventeen were attending Albertain University. Of those interviews four have been selected to document the experiences of this segment of the student body.

N.K., eighteen years old, is studying physics. He plans to proceed to his doctorate. Both parents have degrees in the biological sciences. He went to grade ten in Great Britain. He graduated from secondary school with five credits in English and seven in mathematics:

In English there wasn't much writing. Small essays of one to three pages. I didn't like reading the books or writing essays. My marks were in the eighty's. In Britain the courses were basically grammar and spelling. I learned how to write essays in grade twelve, in my history class. But the teacher didn't have time to correct spelling errors.

I took seven math courses, because I wanted to major in physics. I liked math and did well. My grades were in the ninety's, with ninety-six in calculus. But that course didn't help us reason to the concepts - we just learned the rules.

My courses now add up to twenty-four hours a week. I work nights from six-thirty to eleven, and ten or twelve hours at the week-end. In physics I read a lot of extra things for interest. During the summers I used to read a lot of science fiction.

I've never done much writing. Now its mostly lecture notes or book notes that I use for studying. The secondary school courses were adequate for reading and writing in university. But in maths a deeper basis in calculus would have helped.

This student is young, apparently well motivated and adequately prepared. Unlike most of the others interviewed he has not worked at part-time jobs. He has devoted single-minded attention to an academic career.

By way of contrast, D.N., twenty years old, had carried a part-time job of twenty-three hours per week at secondary school and maintained a mediocre record. One parent teaches high school; the other is a real estate agent. This student, too, has five credits in English and seven in math:

I took one English a year, mostly novels and theatre arts. I hoped to write a little better. They didn't teach you how to write, just how to criticize writing. My marks were in the sixties all the way through. It's hard to get interested in novels if they're lousy. A few I read half of. I was poor in spelling and grammar. You could get extra help in these, but only if you stayed after school. I did best in seminar groups, or discussions, where you didn't have to write things down.

In grade eleven I started to think of university, so I took more maths. Personally I hated it. I knew I wouldn't need it in my commerce course so I just took it for a credit. In grade nine and eleven I failed math. In grade thirteen we got into difficult problems. I couldn't see it was relevant.

In English I used to write stories during class along with a friend. I also used to read a lot of magazines; I subscribe to four or five.

Here at university most of the reading is text books. One course is just lectures. In the others you look to see how important it is; if it's irrelevant you don't read it. There's three to four hours reading a week outside of class time. You slack off at the end of term.

In some courses where you have essays they are very strict on footnotes. You get upset when they treat us like kids. You can get around some of the writing by borrowing essays. I guess I could use some remedial help in writing. Where do you go? I guess I'm lazy. Usually when I do an essay I work on it until I can project my mark at sixty-five. You can miss some of the writing because most of my courses have seminars.

At the beginning of term you only need attend classes - three hours of classes a day. Two weeks before mid-term you work fourteen hours a day. But you worry about the work all the time; it's ulcer-producing.

There is noticeable similarity between the modest career of this student in university and his earlier career in secondary school. Nevertheless, he is fairly

sanguine about succeeding, and expects to earn twenty-five thousand dollars a year within five years of graduating.

Y.I. starts from a less promising background. Her father is a migrant who learned his trade in Italy. Her mother has a factory job. Y.I. was educated entirely in the separate school system. She has five credits in English and six in mathematics:

I kept my programme open, balanced between English and science. In the first four years in secondary school I had some grammar. Grades nine and ten seemed to be half grammar. We were expected to be able to write essays and to appreciate books. I liked writing, but wasn't very creative. And I wasn't a very good reader, even in seven and eight. I was always a bit slow.

In maths I took algebra and geometry and introductory functions and calculus. There were no problems. All A's.

When I started high school I knew I wanted to come to university. In grade ten I decided on a B.Sc. degree, and I hope to get into medicine. If I don't get in there I may try physiotherapy.

In the B.Sc. course you need study habits. If you have a good twelve and thirteen background it helps, especially if you take those same courses in first year university. I don't do much reading outside of regular course work. Classes take about five hours a day. And another four or five studying. It's a forty or fifty hour week this term.

In some courses you don't do much writing. In psychology there was a choice of an essay or seminar. Exams and tests generally never have anything to do with the structure of writing. Then there are multiple choice exam questions, though you have to be careful of spelling there.

You have more on your mind around exam time. But you learn to separate your time. Now when I take courses I'm interested in I let myself get involved. But I always try to spend enough time to get a good mark. That's much more than what is just necessary for a pass.

This student has had good fortune. While not a gifted student she has surmounted her handicap. Her family were able to do little for her but direct her into the separate school system. There she encountered teachers who helped her create an intellectual career for herself. Her university career promises to be an effective continuation of a schooling that provided her with solid support at each junction of her career there.

D.T. comes from a professional family. He was a marginal student; now he is in an applied science programme at Albertown University. He managed a twenty hour a week part-time job in secondary school:

I never liked English. It was a rough go. I'm glad it's over with. The teachers, especially the female ones, got on my back. English came last on my priority list. In grade eleven I did more fooling around than work. So I failed an English in grade twelve. And again in grade thirteen; so I went back to summer school. My English marks were fifty or below.

The tests were too long, and too abstract. They were set for above average persons, in my opinion. I liked some books, and also doing essays. But I didn't like Shakespeare; I got sick of it, and didn't understand it anyway. Then there was really no grammar or spelling after grade eight. If I need to set up a letter I get Dad to help me. I did a lot of reading outside of school. But not books - they're too long.

I took six credits in math - trig and algebra and functions and calculus. I felt these were required to get into university. Did pretty good, except calculus. That I repeated in summer school.

I worked for a while after school, but hated it. I want more than a factory job. At school I never went near the guidance counsellor. My father and I made the decision to come to university. I don't really like the programme, but it'll get me a job.

Classes take three or four hours a day. Outside of classes I work four - five hours a night. Usually don't work on Saturday, but do on Sunday.

There's a lot of reading assigned. In economics, twenty pages a week. And a manual too. I didn't do much of it. It's less confusing not to read. Economics is hard to understand. It's very wordy. It's harder than chemistry. In chemistry there are a lot of problems set. In other courses you can tape the lectures and don't need to read the text. In botany there was a lot of memorization to do. The text didn't help much so I relied on lecture notes. There were handouts in some of the courses but I skipped them.

There isn't much writing in my programme. Just one essay of five to ten typed pages. There's really just lecture notes to write. In labs you fill in the assignment sheets. The final exams are multiple choice or true-false.

When I graduate I'd like a job with responsibility. Maybe something in management.

Two of the four students set high standards for themselves in university. Their backgrounds in secondary school will help them achieve these. The other two have mediocre academic records, especially in basic skills. In spite of these, they will probably graduate from university too, but largely because they have learned to exploit some of the flexibilities of university standards.

In retrospect, the students generally view their training in mathematics as satisfactory, whereas for their English courses they make a variety of negative assessments. Almost without exception, they fault their courses for a lack of training in grammar and composition. They sense that they were left unprepared for the demands for competence in writing essays at the university level. Many of them express regret that they were allowed to choose "interesting" courses in literature, which resulted in their spending time enjoyably, but at a serious cost later. Some of them recognize that they were led into traps. "We were

taught how to criticize writing, but not how to write anything." Others see the efforts they spent on film-making as being an indefensible use of their time. At this stage in their careers, they regret the fact that they substituted interesting activities for practice in the skills they now lack.

Students reported uniformly that their deficiencies in basic writing skills were in effect ignored by most of their other teachers. There is much comment about the scoldings from these other teachers; but they seemed to make almost no effort to build up standards of grammar and composition. Indeed, many of them seemed to encourage the students to respond to examinations by merely enumerating points, so that writing skills were not required.

By way of a side comment, there was some evidence that the teachers of English in the separate school system were more traditional in retaining grammar and composition, and that they insisted on instruction and drill in such matters. There were also reports that other teachers in the separate school were currently reintroducing grammar into the secondary school curriculum in cases where it had been deleted or minimized.

In addition to the interview data, we used our modest survey of recent graduates and secondary school leavers to probe the question of preparedness. Respondents were asked to assess their own preparedness, in each skill area, in relation to the demands of their current position at work or school. We then made an effort to relate the variability in this estimate of preparedness to experience in various sectors of the educational system, elementary and secondary, separate and public.

In terms of the adequacy of skills, as assessed after entry into work or post-secondary education, were there important variations amongst the elementary or secondary schools? Testing by analysis of variance and multiple classification analysis revealed only trivial and statistically insignificant relationships between secondary school of origin and current proficiency assessments for all three skill areas (reading, writing, mathematics). Interestingly, however, the

same two schools accounted for the most favourable assessments in each of these areas: the private Catholic high school and the older, established central city collegiate. In general, however, differences amongst secondary schools did not prove to be at all powerful in explaining skill variability.

Not surprisingly, in view of the weight which our observational and interview data had already attached to the primary setting, the elementary schools proved to be a more important source of variability. A weak, but consistent pattern of more favourable assessments from separate school graduates is congruent with our observation of more traditional pedagogy, curricula and work norms. Nevertheless, there may well be alternative ex-post-facto hypotheses which are equally plausible, such as the existence of generally more positive attitudes toward education on the part of minority school system participants.

We queried, as well, the possibility that the separate school populations might be characterized by early school leaving and an absence of post-secondary entrants. Controls for the present position of the respondent were thus introduced, but the patterning held with but slight weakening. (See Table XII)

Aside from the consistency of effects across skill areas, these observations offer little in the way of explanation: the relationships appear to be relatively slight. Yet the most reasonable inference, that there are consistent but unimportant differences marginally favouring the separate sector, is itself interesting. Although self-assessment is only one possible index of preparedness, the absence of any large differences here is an important corrective to biases found within the public secondary sector. Repeatedly, we heard that the separate school pupils were less adequately prepared in the eyes of their new teachers. We must provisionally view these beliefs as an index of the weak communication amongst sectors.

To return to the interview data, it is clear that most of the university students were eloquent in their denunciation of the content of their English courses. Of all the comments they made during interviews, these were the most pointed. By contrast, few of them

Table XII

ADJUSTED MEAN DEVIATION SCORES* FOR SKILL ADEQUACY BY
ELEMENTARY SCHOOL SECTOR AND SKILL AREA, WITH CONTROL
FOR PRESENT POSITION (Low score = greater
favourability)

Elementary Sector	N	Skill Area		
		----- Reading	Writing	Mathematics
Public	194	.42	.39	.47
Separate	144	-.59	-.50	-.78
Outside-Other	126	.02	-.03	.17
Grand Mean		4.73	5.65	5.32
Beta		.12	.10	.14

*Group means expressed as deviations from the grand means.

offered grounds for criticizing the courses in mathematics. In the cases where they experienced difficulty there, they shifted the blame to themselves - to the fact that they got a bad start in mathematics, or lacked the basic capacity, or ignored the work because of dating or other interests.

While these generalizations are typical of the comments made by students, it is necessary to point out that there were notable differences among the students. Some of the differences were alluded to earlier. A small group of the students had clear-cut career goals which helped them discipline their efforts in both secondary school and in their university work. Science students planning to go to medical school and the student aiming for a Ph.D. degree in physics are cases in point. These students had chosen the secondary school sequences which led to their goals, and had sought to develop the skills that were consequential. Few of them seemed handicapped by their experience in secondary school. On the other hand, these students were usually guided and encouraged by parents who had themselves achieved success in their academic careers. Some had experienced a more disciplined secondary school along a line which afforded them a continuing support for their later academic work (the British, for example).

How have these students adapted to the demands of the university? On the whole, they have found the official standards of university courses to be unexpectedly high. The pace of work is set much higher. "In (secondary) school we had the maximum of time to do a minimum of reading, here we have a minimum of time to do a maximum of reading." As noted above, a few students accept the challenge of the higher demands and manage, by long hours of work, and by imposing on themselves high standards of accomplishment, to live up to the official standards of their courses.

What is striking is the degree to which most of the students discover a system of shortcuts and devices which they employ to reduce the amount and quality of reading and writing they undertake (Gold, 1975). In the tug-of-war that goes on between them and the instructors they seem to have more success in retaining

the standards of the secondary school than the instructors have in implementing the official standards of the university.

The occasional student speaks frankly of "borrowing" the reports prepared by other students. We did not probe this directly; the comments were volunteered. Others spoke of the necessity of avoiding downright plagiarism in their substitution of the work of others for their own composition. These students were reflecting their inability to maintain the amount and quality of writing demanded of them.

Some of these students had been taught how to write a "good essay" in secondary school. They then discovered that at university the demands of various disciplines call for specific kinds of written reports. They had to learn afresh what was a "good history essay". But other students lacked this background training; for them the essay assignment was a novel experience. These students expressed regret and annoyance that the secondary school had not provided this necessary prop for university work.

Students discovered during their first year that there are a number of courses available that require virtually no writing. In describing their courses the notation appears "just the text and tests". Where the tests involve so-called objective examinations or the mere "listing of points" the writing requirements can be met by students who have little competence in basic English.

Students discovered, too, that instructors varied greatly in the stringency of their standards regarding written work. Students occasionally commented that a paper was returned with red circles around the mistakes in grammar and spelling, but these comments were very infrequent.

When asked about their efforts to proof-read and edit papers before submission, only a few students found time and energy to give their writing a final polishing. The ones with a career goal in mind seem to be punctilious in such matters. But they are a small minority. Some claim that they are simply too rushed to find time for editing their drafts of written materials. "At the first of the semester, yes; later,

no." The majority of the ones we interviewed simply rejected the idea of a polished piece of writing. One student reports, "I do it until I can project my mark at sixty-five per cent. Why? Laziness." Another states, "If I'm interested I spend more time; if not - the minimum time." And another says, "No. I'm fed up by the time I finish with it. But usually I don't have any problems."

Most of the students are reporting that they do very little competent writing in their university courses. They have found ways of limiting the amount they are required to do, and of getting by with a poor quality of written work. Not all are tarred with the same brush. There are undeniably students who take pride in their scholarship. As a final note, it appears that the shortcomings of the many are not merely a matter of a lack of technical competence in writing. Their poor writing is an integral web of poor standards of reading, writing, organizing effort, imposing high standards of performance on themselves, and perhaps outwitting the objectives of the university system.

When we turn our attention to reading skills, many of the same generalizations hold true. Those who read widely and conscientiously spend very long days at their work. Those who enjoy a shorter work week have devised ways of minimizing reading. Some students report that they can get along successfully with little or no reading. Their lectures and laboratory hours seem to prepare them to meet the standards of the course. In other situations, although readings are assigned, the student manages to avoid them. Many of them substitute the oral presentation of the instructor for the written materials of the text book.

As in the case of writing, there are wide variations in reading practices. A student aiming for medicine says, when asked if she read everything she was requested to, "I always do - even if I know that I don't have to." An engineering student responds differently, "I read pretty well. But some things are garbage; I skip them. Then there are things you know you won't be examined in." A third student states his case simply, "I don't read the economics book; it just

makes me more confused." Another states, "I don't read the psychology carefully. It's basically common sense." Another says of her calculus, "I didn't read the text book. It wasn't good."

A large proportion of the students try to avoid difficult reading. They also try to reduce the amount of reading. "In novels I just read the first and last chapters." In large part, the students substitute classroom lectures for independent reading. Their dependence on the oral route is very marked. The tape recorder permits them to eliminate note-taking while in the lecture room. The students develop a sense of "what is important" and skip the rest. "Skim" reading takes the place of intensive reading. Where appropriate, they take advantage of group projects to limit the amount of reading each member of the group is called upon to do.

In the discussion of both reading and writing, we have noted that very few students set scholarly standards of performance. In other words, very few adhere to the official standards of the university. The largest proportion of them have discovered ways of limiting the amount and quality of reading and writing. In part, this would appear to be a silent conspiracy of staff and students to bring the ideal standards down to sustainable levels. What is most noteworthy about this is how widespread the "real" standards of the students are, and how quickly they have managed (during their first year in university) to discover and implement the "real" standards of the university in the place of the ideal standards to which the institution subscribes (Becker, 1971).

As we turn attention from the situation in English to that in mathematics, we enter a different realm. Few students collide with courses that require much mathematical expertise. In general, these are the students proceeding to well defined careers. Since we encountered no student concentrating in mathematics per se, we cannot document the degree of preparedness of such students, but for those for whom mathematics is an integral part of their work (as in economics, engineering, and physics) we did not encounter the tales of woe nor the ingenious inventiveness we found on the language front.

The larger proportion of students we interviewed were making no substantial use of mathematics in their courses (sociology, anthropology, psychology along with the literary courses). For them mathematics was irrelevant. One girl noted plaintively, "I'm trying to put all the mathematics out of my mind." These students employ their mathematics in only a meagre way, for example to compute the average of the test marks they have received to date. This is a rather small harvest for the five years in mathematics that many underwent in secondary school.

A COMPARISON OF THE POST-SECONDARY AND EMPLOYMENT SECTORS

Before summarizing the findings regarding the post-secondary sector, it is useful to put them in the perspective of findings from the employment sector.

Data from our survey of school-leavers in Albertain afford a useful comparative summary of preparedness levels amongst post-secondary entrants and novice workers. A contrast of mean self-assessed adequacy scores showed that those entering full-time employment consistently made the most favourable estimates of preparedness for all skills. In reading and mathematics, the CAAT students scored lower (more favourable) than the university entrants, while for writing skills the situation was solidly reversed. For reading, writing, and mathematical skill adequacies taken as criterion variables in relation to present position (university, CAAT, employment, etc.) the resultant beta's were .27, .32 and .25 respectively. Thus, student assessments of adequacy were to some extent dependent upon the situations in which they brought their skills into play.

In order to determine whether the variability in assessments was a function of the frequency with which each skill might be used, control of this variable was introduced through multiple classification analysis. The results for all three skill areas are summarized in Table XIII.

ADJUSTED MEAN DEVIATION SCORES FOR SKILL ADEQUACY BY PRESENT POSITION AND SKILL AREA, WITH CONTROL FOR EXTENT OF USE (Low score = more favourable estimate)

*Minor variation in N's between skill areas due to missing cases.

P = present position	.32		.30
A = assessment of	P	A	P
skill adequacy		.46	A
U = extent of skill usage			U
			.06

Direct Effect = $P_{PA} = .30$

$$\text{Indirect Effect} = P_{PU(PUA)} = .02$$

$$* \text{Total Causal Effect} = P_{PA} + P_{PU(PAU)} = .32$$

*The weights used in such a 'closed' system reflect, of course, control procedures following a priori causal considerations.

Any causal modelling which viewed the extent of usage as an important intervening variable between position and skill assessment had to be rejected on the basis of these data, although position strongly influences both usage and assessment of adequacy. The direct effect of position is much greater than the indirect effect through usage. For writing, this decomposition of effects takes, for example, the form illustrated in Table XIII.

In every case, the indirect effect through usage patterns is reduced to an insignificant proportion and could presumably be ignored in a better identified model. It thus seems reasonable to hypothesize that it is the complexity, the depth, or the consequences of skill usage rather than its mere extent which moulds the young person's assessment of his preparedness. In any case, development of more adequate causal models must wait upon fuller theoretical specification and correspondingly richer data than we have at our disposal.

It is, for example, most probable that the relationship between usage and self-assessment is non-recursive. Our interview data show clearly that students who are aware of their skill deficiencies are both adept at modifying positional demands, and ingenious in devising alternatives to the employment of those skills. Usage patterns, then are probably very elastic in response to assessments of basic skill resources.

At a more elementary level, however, these data do reinforce some basic trends already documented in our study of Albertown. If we assume, as seems reasonable, that the best prepared students with strongest academic self-concepts are among those entering the post-secondary sphere, as opposed to the work world, then it is of consequence to note that these are the same students now making very unfavourable estimates of their skills by comparison with their peers in employment. Despite accommodations made within the post-secondary institutions, there is clear evidence of a dramatic gap between the skill demands of the employment and academic sectors. While many students thus find themselves equipped with skills for which

there are few applications in their work, other graduates, perhaps better prepared in some objective sense, find their skills woefully short of the demands of their new academic setting. We observed this, of course, in our interviews with the two groups. Adequacy, it seems, is very much a situational variable. No student is "adequately" prepared except in relation to specific undertakings of future scholarship or employment. It would seem to follow that it will be very difficult for the schools to prepare young people adequately without rather earlier and more effective identification of probable career lines.

These data also reaffirm the relatively greater seriousness of the problem in writing skills, as opposed to reading or mathematics, especially for the university students. In sum, the profiles obtained from our interview and survey data are fully congruent.

SUMMARY

This foray into post-secondary education in Albertown provides answers to some of the questions with which our study began. There is compelling evidence that many students are poorly prepared to cope with their post-secondary programmes. The deficiencies of students are readily observable to the faculty who teach in the Departments of Mathematics or English. In varying degrees, they are visible to other faculty as well.

Students, too, are keenly aware of their shortcomings. Their teachers in secondary school and post-secondary institutions have hammered the point home. The young people have discovered that they are ill-equipped for the formal demands of any post-secondary courses which require much reading and writing. Students rarely express pride in their secondary school education. They feel that much of their work was futile. Many now express regret that they were permitted to avoid the drill and discipline needed to provide solid competence in mathematics and English composition. In retrospect, they would have

chosen a more traditional emphasis for their secondary school programmes.

In spite of their deficiencies, however, the students appear to be meeting successfully the challenges of their current programmes of study. Where the demands for literacy are heavy, the students have devised shortcuts and expedients that allow them to minimize reading and writing, ease classroom demands, and modify examination requirements.

For their part, the faculty seem to have met the current situation in ambiguous ways. Some of them continue to fight for traditional standards and try to demand these of students. In other cases there is a collective effort by departments to meet the problem cooperatively by recommending remedial courses or entrance examinations by the institution. A large number of teachers seem to have developed a numbness with respect to students' shortcomings, so that they are no longer pained by commonplace errors in spelling, grammar, and punctuation, and the general incapacity to read critically and to compose an adequate writing effort. On occasion, this is coupled with a conviction that it is inherently wrong to fail students in a course, thereby excusing the students' shortcomings. Still others appear to have generated a style of teaching and examination that places progressively reduced demands on the ability of the student to read effectively and to write competently. In part, this is a reversion to an oral tradition; in part it is an alliance with newer technology of the computer age.

The results of remedial courses in the basic skills are not encouraging. The deficiencies in these skills are frequently mired in a morass of poor work habits, ineffective study patterns, careless attitudes toward academic matters, and antipathy toward teachers. More than a remedial course is needed to offset this constellation of difficulties. Moreover, the optimal time for such remedial effort is long past in the career of the student.

In keeping with the "community" approach of this study it is appropriate to place such findings in the context of the generalizations about the other three sectors of Albertown. Although each sector of the

community was explored as a distinctive realm, there have now come into view a set of observations which, together, cast new light on the vexing problems that initiated the study.

The Impact of Expansion

Much of what was reported about the post-secondary sector of education can be recognized now as a response. That response was expansion to meet a formidable increase in the demand for higher education. Not only was the demand one of unprecedented magnitude but it called for extremely rapid growth on the part of universities and colleges.

This expansion was paralleled and influenced by two developments in the employment area. One was an effort to bolster the supply of highly skilled manpower by upgrading Canadian sources rather than importing skills through migration. The other was an unexpected surge in jobs in the service sector, as the society drifted from an industrial to a post-industrial phase. Both these developments pressed growth upon the post-secondary system of education.

At the same time, but in devious ways, the secondary school system too was caught up in the currents of expansion. Students and parents began to anticipate the new opportunities beyond secondary schooling. By a strange quirk, the secondary schools responded to influences radiating from an unexpected quarter, namely from the mass media. In large measure the media preempted the field, as it were, by nudging the schools away from mass education toward mass entertainment, and by alerting students to career paths that challenged the traditional modes of hard work and dedicated scholarship.

Meanwhile the elementary school system was also responding to the expansionary shifts, in part by accommodating many more pupils, and still more dramatically by innovating boldly with respect to curricula, pedagogy, and modes of assessment. These waves of changes eventually broke on the ancient reefs that define the limits to formal education: the

families, homes, neighbourhoods, and forms of recreation and entertainment. These are the barriers which ultimately constrain what the schools can achieve.

Expansion and Adaptation

The response of the post-secondary system was not merely one of astonishing growth. Along with growth came change and adaptation. The student body was not merely larger; its composition changed. Similarly, the enlarged teaching faculties comprised new kinds of instructors. Beyond these changes, the teaching and the assessment procedures of the institutions were strained and remolded. These changes were not the result of systematic debate and collective discussion; they were to a large degree individual and piecemeal responses to novel circumstances. For both faculty and students the ancient compass points for post-secondary education began to drift.

The employment sector was also caught up in rapid change; a revolution in our methods of storing, retrieving, and processing information transformed the skill demands associated with many work roles. Mechanization, miniaturization, and automation reduced the skill component for many occupations, particularly those at the machine-using level. At the same time, this technology created an enormous skill gap between those who use the new instrumentation and those who create and tend it. As a result, conventional academic skill levels became virtually unnecessary for the one kind of job, and almost wholly inadequate for the other.

Growth in the elementary and secondary schools also involved adaptation, not only to a broader spectrum and longer retention of students, but also to the visible shifts in the post-secondary and employment sectors. Modified post-secondary standards for performance and admission were reflected in the goals of the secondary schools. If vicious circles are detectable in the field of education, this surely was one. Universities adapted to a lowered average quality

of applicant, while the secondary schools took this as a cue for the loose preparation of even more such applicants. Meanwhile, the secondary and elementary sectors were locked in a similar embrace. In attempts to ensure the widest access to higher education, the secondary schools adjusted to an increasingly variable preparation, attitudinal and academic, of incoming students, while the primary sector felt thus encouraged to abandon failure and to experiment further with curricula and pedagogy. All sectors were adapting to one another as well as to external pressures.

In a fundamental sense, all three sectors have become involved in common skeins of change. But this has not made them equal partners in change. Indeed, the rhetoric that they speak is one in which the post-secondary sector blames the secondary for its dilemmas, and for their part the secondary teachers castigate the elementary school teachers. The latter have no available scapegoat. More importantly, it is they who have now tried to escape the vicious circle by directly challenging the network of innovations that was planted among them when the expansion began. The elementary teachers in Albertown, without fanfare, are taking the initiative in reforming their own system.

The Student-Centred Culture

The adaptations of the post-secondary system were occasioned by changes in both the numbers and the qualifications of new entrants. The student culture of the secondary school accompanied these waves of students who invaded the colleges and universities. The students who came reflected the relaxed academic standards of their secondary schools, but they also carried hopes of an inexhaustible supply of well paid middle class jobs. Eventually these expectations collided with reality. University students discovered that they were inadequately prepared, in many instances, for even the minimal demands of an academic career. The easy assurance of attractive positions for all soon began to fade as well.

The relaxed attitudes that students brought to the university (reflected in their hopes for attractive jobs acquired through modest effort) have their counterparts in the everyday work world. All the interviews with employers veered around at some point to a discussion of a cluster of objectionable work habits, comprising such things as absenteeism, disrespect for authority, lack of accountability, and generally low standards of performance.

One can note, at the secondary school level, a comparable distortion of academic goals. Indeed, in the sub-culture of those schools the academic component was largely submerged by two other forces. One of these was the emphasis by students and teachers on peer group interaction and sheer sociability. The recent student body stands out as unique in terms of easy-going relationships with fellow students and teachers. Related to this emphasis, and supporting it, was the cultivation of high levels of consumption by secondary school students, many of whom combined extensive part-time jobs with their school work. In both these connections the students, older on the average than their predecessors, were importing adult styles of life into the secondary setting.

At the elementary level one could not expect changes of this order. On the other hand, the changes there were organically related to those occurring at higher levels. The most pronounced of these was the noteworthy diminution of sanctions, on the part of the teachers, to retain and promote high levels of performance on the part of the pupils. Teachers renounced, or lost, the sanctions to fail students, to require homework, and to demand sustained effort in classroom work. Moreover, it was not only the negative sanctions that withered. The positive sanctions mirrored in enthusiastic motivation on the part of students also fell by the wayside.

For the whole system, one could say that concern for high standards of performance tended to crumble as the philosophy of living superseded that of learning.

Performance and Competence

The declines in scholarly standards in post-secondary institutions are easier to document than to interpret. The source of the changes lies with both student and faculty, for they have mutually adapted to a relaxation of admission standards and course requirements. Neither can move to higher levels without implicating the other in a mutual effort. Furthermore, standards of scholarly work are at the mercy of two extrinsic elements. On the one hand technological changes modify scholarly work. The existence of the calculator makes obsolete a wide span of once-coveted mathematical skills. On the other hand, new modes of codifying and presenting scientific data short-circuit the need for precise grammatical statements. Both of these developments change the ground rules as to what constitutes contemporary scholarship.

The above developments have obvious counterparts in the world of employment. Across the spectrum of all the occupations tapped by this study, the computer and the calculator have virtually eliminated the need for mathematical skills. These machines have made all clerks equal as, in another age, gunpowder made all soldiers equal. Moreover, as mechanized numeracy has climbed to new levels in the work place, the need for literacy has declined. The computer digests numerical reports where once the executive interpreted written reports.

It is, however, at the level of the secondary school that the concerns over performance and competence have been most vocal. On the surface, the matter at issue is the place of terminal examinations. There are deeper concerns, however, over the blend of skills appropriate for a secondary school graduate. The policy which generated HSl put all subject matter on a common level, and permitted a student to use a smorgasbord approach to constructing his academic career. In such a system, the student could attempt an advanced course in one subject even though he lacked the resources of cognate or supporting courses. A student could construct a programme that lacked all

organic ties amongst subjects. The logic of a student-centred curriculum inevitably confused the problems of assessing competence and establishing performance standards.

Such difficulties at secondary level are in part shared, and in part provoked, by developments within the elementary sector. There, the whole notion of continuous progress seemed to be at odds with a firm sanctioned performance expectation for all students at any point in the system. In any case, criteria of assessment became very much obscured by curricular modification, new pedagogy, or instructional materials, and by rapid, massive teacher recruitment. Inevitably, the teachers themselves continued to assess pupils according to their personal criteria, but such evaluation was communicated to neither pupils nor parents in any effective way. Negative valuations or failure were seen as inconsistent with paramount concerns for pupil self-confidence and social maturation. A whole generation of pupils and parents was led to believe that all was well, though many teachers knew that this was not so.

Fragmentation

University expansion was accompanied by discipline specialization. The staff who were added during the expansionary period owed allegiance less to a university than to their own areas of study. In the large faculties of Arts and Science, which offered students wide latitude in course selection, departments exercised very little responsibility for the overall programmes of students. The latter were frequently reduced to the status of customers in a department store, shopping for unrelated items. Faculty members offered their courses; they did not assume responsibility for the academic careers of students.

Specialization by discipline did not stand alone. Sub-specialization arose within disciplines. The result was a further isolation of faculty into increasingly narrow interests. Their competition for students for their specialties further reduced their sense of responsibility for the overall development of

the student in his post-secondary career. Students met an increasingly heterogeneous congeries of demands that eroded further the foundation of basic skills in traditional scholarship.

A similar fragmentation has been noted in the secondary system. There too, the unseemly struggle to attract students to competing fields of study is likewise observable. The interests of teachers have turned inward, in the sense that each field has accepted accountability for a minor and arbitrary fragment of the student's performance, and has rejected responsibility for his more general development.

The results of this specialization are abundantly obvious in the realm of employment, in two contexts. The general deficiencies in basic skills constitute a problem for employers, one that has been met in part by transforming much of the work world by computers, calculators, duplicators, automatic typewriters and other technological shifts. The less obvious result shows up when students apply for employment. In that situation, they find that almost the entirety of their secondary school achievements is irrelevant to the jobs available. Moreover, for those who pursue the non-professional programmes of the post-secondary system the same condition has arisen. The student who has concentrated on studying delinquency or urban geography has probably shielded and isolated himself from the job world. Albertown employers repeatedly insisted that the schools were providing youngsters with a "trained incapacity" to handle a regular job. The gap between the orientations of the academic world and that of the employment situation is wider than pupils and teachers have surmised.

Maladaptations

Within the educational structure of Albertown one can detect a system in adaptation. One of its compelling features is its flexibility in meeting the pressures of change. In retrospect, one can see a nest of mutual adaptations. The secondary schools have adapted to the output of the elementary schools by accepting more bodies, by adding programmes of study

and by modifying standards of achievements. On their part, the post-secondary institutions have responded in identical ways to the output of their feeder institutions. The adaptations have been reciprocal. The secondary schools have in turn adapted to the modified requirements of the post-secondary sector by taking into account the changed ceilings of demands.

These adaptations have been documented, too, at the level of student and instructor. At the post-secondary level the instructor has taken into account the deficiencies of the secondary school graduates. Students in turn have responded to teachers' demands rationally by working within, or near the bottom of the modified expectations. On the borderline between elementary and secondary school a similar set of mutual adaptations of teachers and students has been noted.

One of the most prominent adaptations of the whole system is the growth of remedial courses in the basic skills. These have sprouted at two levels. In each case, the adaptation to expansion has resulted in the launching, manning, and development of such courses. At both levels, the institution has had to stop, take stock, and find a way to continue in spite of the challenge of modified standards of achievements. At neither level have the results been encouraging.

The educational sectors in Albertown appear, in conclusion, as a massive pyramid, composed of four strata. At the bottom is the elementary system; somewhat less visible is the grade seven to eight layer; above that is the secondary stratum; topping it all is the prestigious and costly layer of post-secondary institutions. The pyramid is not an organic entity. Rather, the layers are marked by pronounced discontinuities. Since the sixties, the educational pyramid has changed shape in ominous fashion. The sides have become unbelievably steep. As the top layers try to accommodate a growing proportion of those below, the pressures upon the base increase. These lower levels appear now as less than adequate to sustain a solid structure of higher education, and the task of "shoring up" must begin, it seems, with solid educational foundations, particularly in the basic skill areas.

Chapter VII

School, Work and Society: The Processes of Change

In beginning our study, we were charged to explore the fit between the products of the schools and the requirements of employers and post-secondary institutions. The anticipation was that teachers could, with a bit more stamina and effort, improve the fit. Our inquiry into basic skills, however, led to the recognition of a cluster of problems calling for some deeper exploration of the social structure and sub-cultures of the school. As we tried to comprehend how students acquire basic skills, we became impressed with the fact that such learning depends heavily upon the student's work habits and attitudes, his expectations about school and work, and the values communicated to him by the day to day experience of the school. These are at least as important as are formal pedagogy and curricula. The data we derived from the schools in Albertain endorsed this richer, yet more complex appreciation of skill-learning.

Our efforts to assess preparedness led to a further set of discoveries. We became aware that both students and teachers had generated an imposing array of alternatives and adaptations which made survival possible. New methods, procedures and conventions offset skill deficiencies at virtually all levels of the educational system, including the post-secondary. Behind the ideal expectations verbalized by employers lay, as well, occupational demands which had actually been adjusted to the capabilities of their new workers. The text and concerns of the report reflect this widening of our perspective.

In tracing the development and application of basic skills through the school system into the work world, it has been possible to identify a number of

recurrent problems for both organizations and individuals. Trends or concerns encountered in one segment of the educational system have tended to reappear in some guise within another segment or in employment situations. A careful reading of our data will show that the problems of the employers or post-secondary institutions are also, to a very large degree, those of the schools themselves. At each level of learning or employment, skill deficiencies and related work attitudes are lamented and attributed to the setting from which the young person has arrived. Most important, they become the basis for a set of accommodations which divide the realities of coping from the ideologies of discontent. The adaptations of employers or professors are not essentially different from those made by the secondary or even elementary schools.

At all levels, individuals and organizations adapt to the qualities of the available recruits: the population must serve and be served. In eliminating skill demands which exceed the capabilities of new employees, in adjusting levels of expectation, performance standards and workloads, in relaxing, on occasion, the structures of authority and weight of sanctions, employers are responding in ways equally characteristic of the university, college, or secondary school. Granted that many work settings can and do exert stronger pressures for productivity and commitment, given competitive recruitment and retention practices, the similarities are yet more striking than any differences of degree.

Throughout our exploration of various educational and employment sectors, it has been apparent that the common processes of change and adaptation are not simply a result of autonomous innovation on the part of the schools. Rather, the education and work settings are caught up in larger dynamics of social, cultural, and economic change affecting all areas of Canadian and North American life. Repeatedly, we observed that teachers, pupils, employers, or employees were responding as participants in broad cultural shifts or social trends. Such changes were neither originating with nor confined to the schools.

This perspective of institutional participation in socio-cultural transition differs markedly from much current educational critique in which the schools are viewed as a more independent source of current changes in skill levels or work attitudes. Philosophies of education continue to reenforce the popular image of the schools as agents of social change which can, themselves, be changed readily as a counterpoint to shifting social policy and purpose. Sociologists, who must deal with the real world rather than the ideal one of planners or philosophers, have repeatedly identified the limitations of such a model. On the one hand, educational systems are likely to be strongly conservative forces, respecting those monopolies of knowledge and power which form the basis of established stratification systems (Dandurand, 1977). Schools are more likely to reflect than to reject dominant social values. On the other hand, the modern school system is a massive bureaucracy held together by the mutual support of vested interests. It seeks naturally for its own security, growth and perpetuity. As in all such complex organizations, technical experts exert substantial independent power which can block or subvert the intent of any planned political direction which appears as threatening (Bendix, 1945). Thus, schools are neither so consciously creative nor malleable as we might imagine: they tend to move slowly, pulled along by the drift of the larger society while exerting some small pressures and resistances of their own.

In our view, then, an adequate understanding of changes in education can be achieved only when we attend, explicitly, to the embracing momentum of our social, political and economic organization, to which schools both respond and contribute. It is to this task which we now return in a more systematic fashion. We will attempt to set our observations within the larger framework of social change, to interpret the shifting skill requirements of educational and work environments as the outcome of a broader network of interrelated social trends.

THE FORCES OF CHANGE

One way of focussing our observation of skills at school and work is to arrange and synthesize the concerns we have already identified as manifestations of several larger societal trends. From this perspective, problems observed in the schools are not basically pedagogical or internal. Rather, they are part of a larger cluster of social and cultural changes in which the schools and their programmes are intertwined. If one accepts this sort of perspective, one gains a surer grasp of how the educational changes of the past decade have arisen. The consequential debate then runs along a different line. The question is, "Are the educational changes of the past decade an effort to create a new future for education and society, or are those changes themselves an adaptation to more fundamental shifts that have been working their way through the social system?"

Various writers, such as Prof. Lockhart (1971, 1975, 1977) have viewed the innovations of the sixties (such as the "student-centred" open curriculum with its accompanying rationalizations) as forward looking efforts to guide education away from misplaced occupational skill preparation to more defensible "consumer" satisfactions. We would prefer to contend that the educational philosophies of the later sixties were retrospective rather than prospective. They were adaptations to changes in society that were rapidly pressing the school into an altered role. The new pedagogy quite literally was an accommodation to the little understood pressures that had built up around the schools.

To be concrete, what are those changes or pressures that enable us to understand the innovations of the sixties, the skill deficiencies now associated with those innovations, and the subsequent adaptation of the schools themselves, as well as the employers? We believe that our field work in Albertain has provided both insights and data which permit an initial response to these questions. Again and again our inquiry led to important factors and influences outside the immediate settings of school and work. It is

possible, now, to extract and organize these somewhat scattered earlier observations, in order to identify the most critical sorts of formative pressures. We intend to explore ten societal trends which, we feel, bear directly upon our observations of the difficulties in acquiring and utilizing basic numeracy and literacy skills along divergent career lines. Forshadowed concretely through our earlier analyses, these trends are now recast in a more systematic and inclusive manner.

The "Knowledge Explosion"

The body of our knowledge has shifted its balance: in an abrupt fashion the burden of our culture has become technical and scientific. Increasingly, the products of contemporary inquiry and discourse are of a scientific or quantitative mode. With the bulk of knowledge growing more rapidly than ever, such studies constitute an ever greater proportion of our cultural wisdom. At the same time, effective transmission of the new knowledge becomes more imperative as our social and economic dependence upon the related technologies increases.

The capabilities now in demand depart from the heritage of literary and linguistic skills; they are predominantly oral, quantitative, or schematic. Utility takes precedence over convention or aesthetic value, and the vernacular adapts rapidly to new emphases and media.

Such changes in the structure of our knowledge and in our criteria of cultural relevance have profoundly altered the weight attached to classical and humanistic studies and to societal valuations of the aesthetics of communication. In the schools, the curriculum affords a shrinking role to conventional literary studies, as we have already observed. The literacy requirements of work in areas such as the social sciences or applied arts gravitate toward the new modes, with increasing use of oral or stylized quantitative communication as in multiple choice tests. At work, dependencies upon reading or writing skills are similarly reduced or

removed. Paradoxically, the new technology generates increasingly unequal demands even for the mathematical skills with which it is so closely associated. While enhanced pressures for quantitative skills devolve upon positions of inquiry or control in the scientific or technical fields, the layman finds himself increasingly absolved of basic computational requirements by the products of the same technology. The gap lies between the few who design and the many who use the computer, the electronic calculator or the modern cash register, for example.

Traditional high levels of skill in mental arithmetic or in formal grammar may be verging toward the sort of "archaic traits" which Veblen (1953) saw in the preservation of "useless" knowledge and "dead" languages. The symbolism of such learning, expressive of class-related educational traditions and claims to personal status, may be more valued than any great continuing utility. This is particularly the case for many of the educators themselves who become apologists for an earlier style of education upon which their claims to competency are based. Broad shifts, then, in the scope and style of knowledge within our culture are, to some extent, displacing and redefining older notions of basic skills, and this process is neither generated by nor peculiar to the school system.

The Impact of New Media

We can add little here to a wealth of observations on the revolution in our media of communication, but we can draw attention to the implications for literacy at school and work. Written communication has undeniably declined as the population becomes increasingly involved in the newer oral and visual forms based on electronics rather than print (McLuhan, 1964). At an "ideal" level, the school has striven to defend traditions of reading and writing, while the family, the work place, the market place, the world of entertainment, and the mass media have all embraced the new forms. At a practical level, the school is accommodating both to the instructional potential of

the electronic media and the strong bent of the new clientele. Moreover, the younger teachers are themselves a product of the newer media with which they work most comfortably.

Young people do read, and with the prolongation of education for so large a segment of the population, possibly more youngsters are making effective use of print than ever before. Nevertheless, the competition for scarce time as well as the development of perceptive and cognitive styles attuned to oral media make it unlikely that many youngsters will again evidence those effects of sustained involvement in print which characterized the select school population of earlier decades. Thus, levels of reading and writing skills acquired by earlier elite generations of pupils may not be susceptible of reproduction today, on any large scale. Again, this is not a trend originated or even supported strongly by the schools: it is a change thrust gradually upon pupils and teachers as upon parents, employers, employees, or any other segment of our society. Televised revival meetings or audio-visual job-training packages represent organizational adaptations similar to those emerging in the schools.

Centralization and Bureaucratization: the Concomitants of Growth

Many of the changes within the schools are indices of growth or centralization, and reflect organizational trends which have influenced health, industrial, commercial, and governmental institutions as well. The centralization of the school system entailed the consolidation of smaller, largely rural schools, and later of school boards. All of this occurred during a period of unprecedented demographic expansion, to produce schools on a wholly new scale. While some provincial decentralization accompanied these changes, the effect at the level of the community was a move toward larger, more complex and differentiated school structures. Students came increasingly to be handled by a "team of specialists" rather than by a single

teacher in a more inclusive relationship. Similar trends are clearly to be found in other fields such as health services.

With the newer, more bureaucratic structures, the direction of education fell increasingly into the hands of highly placed, technically oriented officials. Responsibility for such basic elements as curricula, or the essential system of rewards and punishments was removed further from public scrutiny and control.

The fragmentation and bureaucratization of personal services has not been restricted, by any means, to the field of education, and the emerging school environment is not unlike that of the hospital, the social services bureaucracy, or the giant insurance company.

The Search for Professional Status

Professionalization currently attracts the efforts of numerous occupations in attempts to raise their prestige and power in society (Hall, 1961). The historic professions - law, medicine, the priesthood, and military - offered services deemed to be of extraordinary personal or societal worth; services, moreover, which were presumed to be available only from practitioners who possessed some combination of rare skills and extensive training. Such occupations were able to claim unusual economic rewards, social prestige and power at the same time that they bound themselves over to the welfare of their clients with a high level of personal dedication, self-regulation, and commitment of resources. The search for the rewards enjoyed by a few select fields has led many occupations into a drive toward professional status, through guarded recruitment, prolongation of training and careful campaigns designed to convince the public of their skill and dedication, as well as the value of their service. Such movements can be located in diverse occupational fields: ancillary health workers, funeral directors, or real estate agents may serve as familiar examples.

Teachers are almost a classic case: in Ontario, the drive for income, prestige, and power has become something of an obsession. Several effects of teacher professionalization have, moreover, become evident in our scrutiny of the schools. First, the degree of specialization has been increased and greatly emphasized, highlighting allegedly unique demands of specific content areas. Secondly, stress on the importance of lengthy and specialized training for teacher incumbents, based on these subject area demands, has strengthened a hierarchy of interest and investment which favours "advanced" skills over "basic" skills, secondary over primary settings. Secondary teachers, anxious to advance their claims unencumbered by the weight of the elementary personnel, have thus resisted efforts to merge their various teacher professional associations. Finally, and perhaps most significant, teachers have come increasingly to expect and seek those rights to self-regulation and evaluation which characterize the historic professions. If the public accepts the argument that the teachers alone really possess the technical expertise to define and implement educational objectives, then control of the educational system shifts radically.

What is emerging, of course, is what Etzioni (1969) and others have labelled a semi-profession. At a time when the historic professions are themselves being changed and absorbed within bureaucratic organizations, the drive of the teachers was bound to failure. The availability of a seemingly endless supply of teachers, the visibility of the role performance to the general public, the successful undertaking of teaching tasks by those with very limited formal training, and the elasticity of demand for education all undermined the ground upon which the teachers had hoped to advance. Redirected rather than stalled, the teachers employed their new organizational strengths toward economic advancement, at the expense of prestige and even control. With union organization there emerged new kinds of union thinking. For some, this involved a narrow technocratic view of responsibilities, a careful rationing of input against monetary rewards, a use of work-to-rule sanctions and

periodic antipathy toward a "management" comprising politicians, administrators, parental public, and pupils. For many, it involved a reorientation to bureaucratic rather than professional norms, with the expectation of careers leading away from the classroom and the client, toward administration, consultation or research (King and Ripton, 1970).

In all of this one sees a development which is very much out of touch with the ideal of "professional" service. In any case, the trappings of professionalism and the currents of unionism are equally out of place in an occupation where the patient, routine monitoring of elementary achievements in communication and computation remain an inescapable and continuing task. Reorientation to this rather simple and personal service, then, is very much at odds with both the aspirations and the self-image of many teachers.

Here again, what is occurring in the school merely reflects broader changes. Like other work organizations, the school is a setting in which various occupational groups struggle to advance their somewhat independent fortunes: professionalization is a societal rather than an educational phenomenon.

Democratization and Social Policy

"Democratization" has two facets. On the one hand, it refers to the spread of egalitarian ideologies through the schools, as elsewhere in society. On the other, it refers specifically to the programmes aimed at reducing disparities between income classes and ethnic groups. There have been noteworthy efforts to retain the traditionally disadvantaged groups in the school system. Good grammar and good manners have been viewed as less significant criteria in assessing students while traits such as "creativity" (presumably distributed more equally) have become central to the reward system of the school. In these matters, the school has striven to adapt to new kinds of populations and has eventually incorporated these in the teaching staffs. This process of democratization continues to run its course through our school system.

Efforts to achieve a more open and egalitarian social structure were not confined to the school. Nevertheless, while employment opportunities, health care, and regional economic disparities became focal areas for equalization as well, the schools were seen as the most powerful instrument of social policy (Lennards, 1973).

Apart from the strains imposed upon weakening linkages between educational achievement and employment opportunities (Harvey, 1974), the educational system soon evidenced other serious limitations as a tool for social reconstruction. In general, efforts at massive educational upgrading soon exposed the limitations of school socialization in situations characterized by cultural discontinuities amongst family, neighbourhood, media, and school. In such settings and for particular populations the school is an effective but limited resocializing force.

Yet the schools were not asked to be merely "effective": they were expected, within a decade, to retain and upgrade large and traditionally disadvantaged segments of the Canadian population. Equality of achievement was taken, rather illogically, as the meaningful index of equality in educational opportunity. As a result, curricula, performance standards, authority structure, and sanctions were all remodelled to provide new retention and achievement levels for the new student population.

Growth served the interests of career educators and administrators, despite grumbles of growth pains, declining standards, or pedagogical uncertainties. Schools and school personnel increased in power, prestige, and wealth of resources. In 1954 the average per student expenditures in the province were \$188 at elementary level and \$405 at secondary level. Ministry ceilings established for 1975 were \$926 and \$1441 for elementary and secondary: thus investment, on a per capita basis, more than tripled over two decades. Between 1960 and 1970 school board expenditures averaged an annual increase of 6.5% per pupil in constant dollars (Ontario, 1975). Such investment was rationalized primarily on the basis of human capital theories but popularized on the ground of democratization. The educators at all levels including

the post-secondary knew what was expected, and accommodation labelled as innovation became the order of the day, an avenue for the mobility of occupations as well as individuals. Only with a growing recognition of our bypass of secondary industrial development, the querying of education-occupation linkages, the mounting critique of human investment theories and the reconsideration of education as a consumer good, have we now paused to question the quality of our educational system. Only as we begin to reassess quality in the light of cost have we begun to challenge the equation of success and growth. Moreover, we now recognize that much of the change observed in the schools is not an outcome of growth, but a deliberate restructuring designed to make growth possible. With this trend, as well, the schools share in the preoccupations and aspirations of the larger society, reflecting rather than informing social policy.

Assimilation

Closely related to the shift from elitist to egalitarian structures are the tasks of assimilation which have devolved upon Canadian schools. While the adaptation to ethnic immigrant populations has been particularly visible to urban observers and commentators, a less obvious form of assimilation continues in relation to rural populations. Post-war rural to urban migration, the continued flow of rural migrants from the east and north, and school consolidation which draws rural youth into urban school systems all contribute forcefully. Ontario schools increasingly reflect urban secular values and orientations to which culturally or sub-culturally differentiated groups are assimilated. Such groups may be characterized by highly idiomatic or variable use of English as a first or second language, by strongly practical and applied perceptions of education in relation to early work entry, and by marginality to the extra-curricular foci of the school. Assimilation of such groups involves the school in a reciprocal

process: the schools are changed in their efforts to effect change. Thus, adaptation has not been directed exclusively toward breaking the historic links between achievement and socio-economic status; educational structures have been responding to the larger processes of urbanization and massive immigration.

Youth Culture and the Redistribution of Power

The democratization of a system offers new groups an opportunity to exert power: this students have done. The baby-boom granted them the numbers that assured them a place in the power system. Industry and commerce encouraged them to be vigorous, self-conscious consumers of goods and services. Well intentioned members of society encouraged them to congregate for longer time spans in educational institutions. The mass media accorded them a symbolic power far in excess of their resources. In these circumstances, the older authority structure of the school was ill-prepared to meet the growing power of the students. Eventually the student body evolved as a more independent and influential component of school structure and of educational processes.

Curricular choice increased the power of the students by creating a somewhat competitive market situation. Subject or course enrolments developed as important new controls. Traditional, informal, face-to-face classroom sanctions were turned increasingly, by the students, to challenge teacher role-performance or curricular directions. In a more subtle fashion, however, the growing status of the youth culture itself has become a source of symbolic power. The values, argot, dress, deportment and art forms associated with youth culture and media have exercised an attractive power for young adults. Progressively, the mood of the school and, indeed, of a portion of the teaching staff have come to reflect, and emulate many behavioural and popular cultural elements associated with youth. As an agent of socialization to conventional adult values, work habits, or deportment, the school has been correspondingly weakened. If the

student, however, now looms as a more independent and powerful influence on the structure and direction of the educational system, this is no more than what has occurred outside the schools, in the family, the market place or the political arena, where greater youth-consciousness has evolved simultaneously.

Work Ethic

There is mounting evidence that, over the past two decades, consumption and the good life have taken precedence over hard work and thrift. The value of a sturdy commitment to hard work and high productivity seems to have tumbled into disfavour. It is difficult, of course, to make any inference from the mounting evidence of declining worker productivity, since we cannot disengage motivational or skill components from the organizational and technological setting of work. Yet, in the view of many observers, work habits and attitudes are a matter of concern for both our economy and our society. Continuing high expectations of income and leisure now appear to accompany work commitments which are declining in duration, intensity of effort and ego-involvement. We observed and reported such attitudes on the part of some growing segment of students and teachers, for whom notions of "the value of hard work" or "the striving for excellence" have lost much of their relevance. We heard much criticism from educators who saw such attitudes as the central factor in low achievement levels. Echoes of discontent were then heard from the employers in our community. The basic skills which they wanted to talk about were the social skills of attention, punctuality, application, and involvement: their concerns were primarily with the work habits and attitudes of young employees rather than with levels of numeracy or literacy skills. Clearly, both the schools and the employers are coping with cultural changes which they have not authored, but which they support, perforce, by adaptation.

The Legitimation of Authority

Much of the behaviour which we observed in the schools clearly reflects a change in authority structure. Yet it is not the authority of the school which alone has come into question: the controls of management, government, the church, and the family have also been challenged. In an era which saw the radical decline of traditional religious, rural, and conservative values throughout Ontario, many conventional sources of authority became foci of mistrust as their legitimations weakened. The mere exercise of authority came to be blurred with its abuse or exaggeration - with "authoritarianism".

The historic authority of the school rested on real resources, in its power of social selection, certification, and allocation, and in a largely symbolic way on the associated legitimation of adult, parental, and legal-rational authority. School structural changes which minimized selective sanctions in the interest of retention, some perceived losses in the occupational relevance of education, the societal decline of adult, parental authority accompanying the new youth-consciousness, and the widespread questioning of civil authority by labour, military or civil rights movements, all contributed to a climate in which the authority of the school was bound to wane. Moreover, the relaxation of controls fitted well with a goal of maximum retention, since the school could accommodate a wholly new diversity of deportment and life style. The schools certainly did not want to be "authoritarian" in a decade caught in the momentum of egalitarian and civil rights ideologies; but then, neither did parents nor politicians. Change in the school was thus integral to a much larger redirection of Canadian society.

The Post-Industrial Work Force

Educational systems have generally proven responsive to the changing structure of the labour force; important shifts in the distribution of the

Canadian work force should, therefore, signal adaptations within the school. In retrospect, it can be argued fairly readily that the massive expansion of education into scientific, technical, and commercial curricula expressed post-war expectations of industrial growth. Our schools geared up to supply the scientists, engineers, and technicians which the new secondary structure would require, or which, according to some, would virtually produce that structure (Economic Council of Canada, 1964, 1965). Yet the labour force, the intervening influence between the economy and the schools, moved very rapidly in a somewhat unanticipated leap toward the tertiary sector.

In the decades of the fifties and sixties the shift of our work force into tertiary occupations was dramatic and unparalleled, while the proportion of secondary employments remained somewhat stable. Between 1950 and 1970 the proportion involved in the tertiary sector increased from forty-two per cent to sixty-two per cent (Rush, 1977). Have our schools been responding to such changes?

If a higher input of personal service and information processing skills is now demanded, the technical educational expansion and emphasis of the fifties and early sixties may have lost a good deal of their relevance. We observed a marked shift of interest in the schools, away from skill development to personal growth, new experience, and the cultivation of social skills. Whether this implies a reorientation of education toward immediate consumer satisfactions as opposed to marketable certification as some have argued, or whether it involves a groping toward the career needs of expanding tertiary employments, it may be too early to determine. In any case, the school is in a process of response to external changes in the economy and the labour force which are not yet fully appreciated.

In conclusion, it should be noted that while the processes of change identified here form important points of reference for our particular focus on basic skills, there are undoubtedly many other sorts of reciprocal pressures relating the larger society to the school system. Their consequences would surely be

observed in relation to other problems and in divergent directions of inquiry. Such contextual awareness has, in any case, proven critical to our understanding of those educational outcomes which we sought to explore. Moreover, the reintegration of findings in this broader context lends, we hope, a deeper meaning to all our earlier observations on Alberttown.

CONSIDERATIONS OF POLICY

The assessments, perspectives, and explanations developed in this report direct attention to certain areas which appear to be particularly critical for the review and development of policy. Without presuming to suggest specific policies, it may be useful, in conclusion, to identify these areas.

1. The Need to Focus and Economize Goals in Education

One inescapable conclusion from our research is that the schools have accumulated an awesome range of objectives. The academic objectives have proliferated. In turn, these are supplemented by a great range of social goals as well as those of personal development. Teachers and administrators are saddled by these, even as they are being requested to generate a core curriculum unencumbered by frills. The variety of objectives vastly complicates the task of formulating a rational curriculum for the school system, particularly as the inclusion of some goals will preclude the effective realization of others.

These developments have emerged largely by default. There has been no systematic debate as to the appropriateness of school objectives. We surely require some open deliberation which can attend to the cost and effectiveness of the newer goals, as well as their compatibility with traditional objectives.

2. The Redirection of Resources to the Primary Sector

The thrust of educational policy in recent years has been toward expansion and enrichment at the secondary and post-secondary levels. This investment was strongly related to considerations of human capital and projections of our need for highly skilled labour. Our research, however, tends to reenforce a pyramidal view of education: each level requires the firm foundation of more basic skills. Deficiencies at any level are extremely costly and difficult to remedy at a later stage. Moreover, skill deficiencies have a most serious effect upon scholarship in secondary and post-secondary settings, where current levels of activity and resources are very largely a hidden redress of both skills and work habits. Although the elementary sector is the most consequential area of education, fewer resources are directed there, by contrast with the more prestigious upper levels. A more rational allocation of resources to the primary setting would advance the standard of potential achievement at succeeding levels. Further, a more intensive effort in the early stages of the educational career could salvage a large segment of the student population now effectively excluded from the higher levels through chronic deficiencies in skill, motivation and work habits. There are many good reasons for which students could and perhaps should leave the school system at various points, but exclusion on the basis of inadequate earlier preparation is hardly defensible.

3. A Review of the Cost, Timing, and Effectiveness of Remedial Efforts

Initially, it may appear plausible to promote remedial courses at secondary and post-secondary levels in relation to observed needs. Our observation is that it is far from easy to launch effective remedial work at these levels. Remedial courses can develop as routinized and isolated gestures toward upgrading, or as penalties rather than as opportunities. Even so, the deficient student may prove appreciative of any formal mechanisms which shield him from more extensive

and consistent demands: a grateful client is not necessarily a well served client. Resources required for work at these levels are almost on the scale of individualized instruction, with extraordinary cost in terms of manpower. In some instances, remedial courses may come to constitute additional, or artificial hurdles on the path to certification, resented by the student as by the embarrassed instructor. The mood of such an enterprise will be strained and costly, in psychological terms, to both pupil and teacher. Students may enter with a history of deficiency and failure in particular areas, from which flows a belief that the remedial efforts must fail. Finally, the effectiveness may be limited by the inability or unwillingness of the student to relate the skill upgrading to other academic tasks with which he has already come to terms despite his deficiencies. In sum, the later the remedial work, the more difficult, costly, ineffective, and irrelevant it is likely to be.

A critical review of the costs, benefits, and timing of remedial work, in relation to the options of stronger efforts and possible streaming at the primary level, should be undertaken.

4. A Need for Greater Consistency and Continuity in the Educational Process

We now understand very well that the effectiveness of any socialiation process depends heavily upon the consistency and continuity with which it can be implemented. Nevertheless, our research in Albertown brought us face-to-face with repeated gaps and discontinuities in the student's experience of the school.

A fragmentation of the school system by the longstanding isolation of separate and public, primary and secondary sectors impinges forcefully upon the careers of the students. Through discontinuities of curricula and pedagogy as well as some blockage in the flow of information, student learning suffers. Mistrust and the virtual absence of meaningful contacts characterize the relations of public and separate sectors. The absence of grades eleven through thirteen

within the separate system most often necessitates a transition made hazardous by the lack of adequate information for both students and teachers involved. Primary and secondary sectors are divided by continuing struggles for resources and, above all, by invidious claims to status and the rivalry of professional organizations. Such divisions, which serve the ends of some groups of teachers and administrators at the expense of others, make little sense for the student, whose skill-learning and personal growth cannot be carved up in a corresponding fashion.

Another serious sort of inconsistency results from the fragmentation of teaching tasks which appears to us to have reached an excessive level of specialization in both claims to expertise and acceptance of responsibilities. It has become evident from observations in Albertown that efforts to motivate toward skill attainment, or to monitor and reward proficiencies, must become more consistent if they are to become more effective. If the school system wishes to set and maintain levels of expected achievement in basic skills, then the task must devolve upon all teachers, in so far as such skills may relate in any way to the subject at hand or may become visible in any work with the pupils. Neither the task nor the responsibility can be left to the unaided resource of teachers in mathematics or English. Every teacher, particularly at the secondary level, must accept the broader responsibilities for general learning and basic skill enhancement which have been the cornerstone of elementary teaching. Radical subject specialization and narrowness seem wholly inappropriate and unnecessary at secondary levels. Neither the employment nor post-secondary sectors require extreme specialization: they look to the secondary schools to enhance and enrich prerequisite basic skills and work habits as a continuing central objective. Moreover, the effect upon students, as we have seen, is an equally abrupt compartmentalization of both competencies and expectations long before literacy and numeracy skills have been adequately grounded. In the case of communication skills, for example, development must continue, in accompaniment to the student's

general intellectual development, well into the post-secondary experience. From this perspective, any prospective curtailment of studies in literature in order to provide a small niche for the renewed but isolated study of writing skills would appear as a dangerous and ineffective solution.

In sum, greater consensus on goals, consistency, and communication across grade levels K-13, and across subject areas appears to be highly critical for the achievement of any upgrading in the areas of basics.

5. Reconsideration of the Role of the Secondary School

Another conclusion from our study is that the employer, in the vast variety of job openings, makes exceedingly little use of the academic and technical skills of the secondary school student. For the great range of initial jobs in industry and commerce the student is inducted into the work through simple demonstration by another worker. Very little reference is made to academic or technical skills provided by the school.

Moreover, the growth of the CAAT's has provided the employer with another source of supply. The emergence of these colleges means that the secondary schools are frequently duplicating work that will be done as competently elsewhere.

In view of this vast gap between the efforts of the secondary schools to provide technical and academic skills, and their meagre application in the work world it can be concluded that much of the effort of the school to be technically useful is both ill-placed and costly, in terms of resources. This whole area should be reconsidered in relation to the focussing of goals.

6. A Time to Question the Value of Custody and the Realities of Streaming

Retention of students has conferred the double blessing of restraining entry to an over-crowded labour market while enriching youth through extended

education, or so goes the rhetoric. What of the reality?

The reality is decidedly anomalous. Our inquiry revealed a large number of nominal students who are, in a very real way, already in the labour market. This group spend a substantial part of their time and energy at work for rewards which amount to far more than "spending money", while at the same time they manage to carve out large segments of recreational time. That they are yet able to carry their full-time studies successfully speaks to the level of the school's demands. Much of the enrichment which their education is said to provide appears to us as a polite fiction.

One can readily argue that there are real advantages to the student in gaining a first-hand, authentic acquaintance with the world of employment. He can meet, and perhaps adopt, the sorts of discipline found in the work world while he is relatively flexible and adaptable. On the other hand, the careers of such students are markedly dissimilar from those of the students planning serious work at the post-secondary level.

While the experience of earlier rigid systems of streaming has drawn attention to the risks of unwanted and unintended consequences, there remains a real need to recognize and respond to the divergent commitments and needs of the students. Those who opt for the world of early employment should be aided and encouraged to seek rewarding careers there. Those heading toward post-secondary careers should be assisted and motivated to work more vigorously and intensively for their goals, in courses geared to their differential requirements and competencies. This need does not appear to be met by the present awkward mix of general and advanced courses devoid of prerequisites. Our data clearly show that the demands of the employment and post-secondary sectors are increasingly divergent: students who move directly to work are in many cases excessively and irrelevantly trained, while those who go on to college or university are not prepared to meet conventional demands and performance levels which adapt at the expense of the student and the institution. At present, a covert, partial and ineffective streaming

does exist, yet it meets the needs of neither group. Consideration should be given to loosening the custodial function of the school, facilitating an honourable early entry to the world of work, and resolving the need for some form of streaming.

7. The Need to Retrieve a Workable Pedagogy at the Post-Secondary Level

At the post-secondary level, we were able to observe the degree to which traditional teaching patterns have proven inapplicable in the absence of conventional skills. Many of the students we contacted were unable to meet the expectations of their instructors or to cope with conventional materials and tasks. They survived by improvisation with other skills, shortcuts, mutual help, or minor deceptions, facilitated by the reciprocal compromises of the instructors in matters of format and performance standards. Most of these accommodations, however, do not bear the imprint of either systematic discussion or reasoned acceptance. Rather, they have been embraced in the stress of teaching or learning under conditions of growth, change and uncertainty. Nevertheless, these developments have important implications for the quality of post-secondary education. We believe that there are defensible standards of skill and achievement which may be threatened by accommodations not fully visible for scrutiny and debate. A task force could profitably consider shifts that have occurred on both sides of a troubled situation. The discussion of teaching methods could thus be raised to more fitting levels of importance and assistance.

8. Reviving the Search for Excellence

The pursuit of excellence surely deserves a central place in framing educational policy: in the community we studied, however, this objective was seriously blurred. A decade or more of school reconstruction had left the impression that excellence

rested in facilities, pedagogical innovation, teacher expertise, or curricular opportunities rather than in observable and predictable outcomes for the student. Moreover, the pursuit of academic excellence was associated vaguely with competition and with invidious distinctions of attainment and worth, both of which had fallen into some disfavour. For many educators in our community, seeking and rewarding scholarship was not a prime concern. Much of the pedagogy we encountered seemed to have routinized mediocrity as a goal, relaxing the demands upon students and teachers alike.

Education is essentially the sort of enterprise that involves the continuing effort to raise it above the routine and the ordinary. At one time these goals would have appeared incongruous, given the lowly status and low incomes of teachers, and the meagre budgets of school plants. In the context of the current rewards of teachers and the elaboration of facilities, it is appropriate to foster a sense of the importance of education to society and the possibilities of excellence at all levels. The avowed pursuit and reward of such excellence should be made respectable once more.

Appendix A

Questionnaires and Schedules

SCHEDULE FOR EMPLOYERS

Face Sheet Data: Name of Company; Title and department of person interviewed; Length of time with company; Length of time in present position; Sex; No. of persons employed by sex and occupational category (Occ. Type, Male Female); Union affiliation; Actual or estimated turnover by type of employee a) Annually, b) Five year period. Nos. 1-8.

9. Who in the firm is in charge of recruitment?

10. What are the sources of new recruits? (type and frequency of use)

11. Is there any form of testing involved in the selection process? If so, what and who conducts such tests?

12. What is the proportion of failures from such tests?

13. Are there informal techniques employed? Such as what?

14. In brief how does the recruitment procedure operate? Are there formal or informal stages?

15. What are the initial steps taken in placing a recruit? (reference to occupational type)

16. Is there a probationary period? (formal or informal) How long is this period?

17. What procedures are used for assessing the competence of a worker on the job? (occ. type)
18. Who conducts such procedures? Are they used systematically? Is the employee aware that the assessment is taking place?
19. How many new workers in the preceding twelve month period? (Type and no.) (graduates/drop-outs of high-school)
20. How does this compare with say a year or five years ago?
21. How many were rejected in the selection process?
22. What were the reasons for rejecting them? (ie. academic, technical, other)
23. How many were accepted? (type & no.)
24. How many were accepted who needed remedial training? Did they receive such training from the company? Of what type was this training?
25. What is the estimated cost of giving such remedial training?
26. How many survived the (formal/informal) probationary period? (type & no.)
27. How many did not, and the grounds for rejection?
28. How many survived post probation? Of those rejected why?
29. Of those workers retained what was the nature of, or basis for their assessment? (ie. academic, technical work or other skill)

GENERAL COMMENTS AND COMPARISONS OF NEW WORKERS

30. Can comparisons be made of these new recruits with those of five years ago? Earlier?
31. In general, what is your opinion about the adequacy of new recruits today? (ie. work orientation, technical, skills, academic background)
32. Do these recruits exhibit any inadequacies? (occupational types) (communication/arithmetic skills)
33. Are these inadequacies large enough that they require any remedial training?
34. Do you see these inadequacies as being specifically related to occupational type or to your specific company situation?
35. Do you think this is the case generally across most companies/ industries?
36. Are there opportunities within the company for upgrading, retraining, or continuing education? Are these formal programmes or is it left up to the employee to do on his own time?
37. How soon after employment is the worker eligible for upgrading programmes?
38. How soon is he eligible for serious administrative responsibility?
39. What other kind of limitations are placed on the young worker?
40. How many employees take advantage of these programmes?
41. Does the company derive any benefits from such programmes?
42. How is the progress of the employees measured in these courses?

43. Do any academic shortcomings ever show up during these courses?

44. Did the company offer any training programmes five years ago?

45. If changed - Why have these changes come about?

46. What sort of role do you see the school system playing in preparing young people for the world of work? (major/minor)

47. Would you make any changes in the system? What & Why?

48. In your opinion have the new workers coming out of the school system changed at all over the last five years?

49. Has this created any advantages or disadvantages for the company?

50. Do you belong to any community political organizations? What are these?

51. Are there any other issues which you think relevant concerning the new workers of today? (ie. basic skills such as mathematical or communication necessary for specific jobs, if not already mentioned)

Thank you.

SCHEDULE FOR SUPERVISORS/FOREMEN

Face Sheet Data: Name of Company; Title/Department; Sex; Age; Length of time with company; Length of time in present position; Number of employees supervised (sex & occupation). Nos. 1-6.

7. How many workers (graduates of high school/dropouts) have been hired this year for your

department? (sex/ occupation)

8. In brief, how does the recruitment process operate in this company? (division of labour: who does what?)

9. What are the sources of new recruits?

10. What role do you take in the selection and placement of these new workers?

If directly involved in selection:

11. How many workers were rejected in the interviewing stage and what were the reasons for their rejection?

12. What sort of attributes or skills do you look for in a new recruit? (specify skills for specific jobs)

13. Is there a probationary period? How long is it?

If directly involved in placement:

14. What are the initial steps taken in placing a recruit?

15. What procedures are used in assessing the competence of a new worker? (if testing is involved who conducts such tests?)

16. How many of the new workers this year did not survive the probationary period and why? (ref. sex/occ.)

17. How many of the new workers retained are deficient in basic skills; enough to require some sort of remedial training? (skills/job/sex)

18. How many received any sort of remedial training and from where?

19. How many have survived the post probationary period and what are their attributes (skills)?

20. How are these employees assessed?

If a person has held position for a considerable length of time (ie. five years):

21. How do the new recruits, today, compare with those of five years ago? Earlier?

22. In general, what is your opinion about the adequacy of the new workers, today?

23. Do these recruits exhibit any inadequacies? (sex/job/skills) If there are inadequacies:

24. Do you see these inadequacies as being job-related?

25. Do you think that this is generally the case across most companies/industries?

26. What sort of role do you see the school system playing in preparing young people for the world of work (basic skills: communication/mathematical)?

27. Would you make any changes in the system? What, and reasons for changes?

28. Are there any other issues that you think are relevant concerning the new worker of today and/or the school system?

SCHEDULE FOR TEACHERS

(Basic Questions; Revised Nov. 1975)

Face Sheet Data: Name; Position; School; Board; No. of Years Teaching; Sex; Age; Date of Interview; Interviewer.

Before we begin to talk, perhaps you have questions concerning the research project which I could answer for you. I would like to reassure you that all interview materials are strictly confidential: they are for the use of the researchers only and will in no way

be relayed to your fellow teachers or administrators. You can best help us by giving a candid and personal response, rather than speaking "for" the school or board.

First, I should like to ask you a few questions about your own background and general educational philosophy.

1. How would you describe your role as a teacher? Do you think of this role as being traditional, or breaking with tradition? (Examples.) 2. Do you feel that preparing your students for the work world is an important goal for you in your teaching? (Examples of what he/she does to illustrate this.)

3. How do you feel about the "continuous progress" programme in the elementary schools?

4. Does the secondary school teach "basic skills" such as reading, spelling, grammar and arithmetic, or does it basically presume such abilities? (If so, which grades?)

5. How important was your teacher's college experience in the development of your philosophy and skills as a teacher? What about workshops organized by the Ministry of your local board? Other sources?

6. Are there different "schools of thought" amongst teachers as to how (subject area) should be taught? Can you describe these different "schools" to me? Are these present in this school? How do you fit in here?

Now, I would like to ask you some questions concerning the (subject area) programme in your school, and your assessment of the outcomes of that programme:

7. (a) Do you have a course outline for your teaching of (subject)?

(b) Where did it come from? How was it developed?

(c) Where do you get your teaching materials from?

Do you experience problems in having adequate materials?

8. To what extent are the (subject area) skills which you teach used in other classes or activities in the school? (Can you give examples.) Alternatively: Do you make use of basic skills in (subject area)?

9. (a) Do you personally feel satisfied with the level of achievement in (subject area) typically demonstrated by your students?

(b) What criteria do you use to evaluate the achievement of your students?

(c) Are there specific gaps or shortcomings your students have, of which you are aware?

(d) What would you identify as the reasons why your students experience shortcomings in these areas?

(e) How would you assess the impact of television on the learning of basic communication skills by young people today?

10. How large is the role of the school in conferring "basic" (subject area) skills, by comparison with the role of the home and the media?

11. (a) There has been a lot of public concern over alleged "deficiencies" in the basic communication and mathematical skills of high school graduates: why do you think people have made such claims?

(b) Have you, yourself, had any direct feedback, either positive or negative, from students, parents or employers on these questions?

(c) Do you think that your students attach much importance to the acquisition of basic (subject area) skills? How do they show this?

12. What methods of evaluation do you employ for your classes?

13. Are there standardized evaluation and test procedures used as well? (Which? How often?) How do your students fare on such tests?

14. Is there a range of skills observable within the same class? (Probe for grade levels, proportions.)

15. How do you handle classes with such variation in abilities? (e.g. grouping/streaming/remedial)

16. What effects does this spread of skills have on standards and failure /promotion patterns?

Finally, a couple of questions about change in the schools:

17. (a) From your observation and experience, what are the most important changes which have taken place in the teaching of (subject area) over the past ten years or so? (Probe for specifics, examples.)

(b) What role has the board or Ministry played in these changes?

18. Have you noticed changes in the students over the past few years? What sort of changes?

I really appreciate the help which you have given us in trying to understand these issues: there are no more formal questions, but I wonder if there are any additional comments or suggestions which you would like to add?

ADDENDA FOR DEPARTMENT HEADS OR COORDINATORS:

H1. In your capacity as (Head/Coord.) could you please tell us... Is there an evaluation of basic skills that extends beyond the classroom to a school-wide or county-wide level?

H2. Could you tell me what these are?

H3. What findings have come from these evaluations?

H4. What kinds of on-going contact do you have with the Ministry of Education or school board in the area of basic skills? What kinds of assistance do you ask for or get from them? What kind of assistance do they ask of you in this respect?

H5. Have there been any major shifts or changes in Ministry or board policy which have affected the teaching of (subject area)? (Probe.)

SCHEDULE FOR PRINCIPALS

(Face Sheet data and preamble identical with Schedule T, Revised)

First, I should like to ask you a few questions about your own background and general educational philosophy:

1. What do you personally consider to be the most important responsibilities of a principal? (what/to whom).
2. Do you think of yourself as being more traditional or as breaking with traditions in your role as a principal? (Why do you say this? ie. Specific things they do or would not do)
3. What do you consider to be the appropriate aims and responsibilities for your school in teaching basic communication and mathematical skills?
4. How much weight would you assign to "preparation for work" as an educational goal for yourself and your students?
5. What would you identify as the major influences or sources of orientation in the development of your own educational philosophy? (Probe for specifics of direction as well as source of influence).
6. How have these influences affected your approach as principal of this school?
7. Are the present goals and techniques in the instruction of basic skills similar to those you personally encountered in teacher's college? How do they differ? (Probe)

8. (a) Are there different "schools of thought" amongst teachers as to how basic reading and writing should be taught? Can you describe these different "schools" to me?

(b) Are there such variations in the teaching of mathematics?

I have a few questions, as well, about (name of school):

9. If you were describing your school to another educator, what things would you single out as particularly important or unique about (name of school)?

10. Are there other ways in which this school differs importantly from others in Albertown?

11. How would you describe the student population of your school? (Current enrolment)

12. Are there any characteristics of the community in which the school is set, which are of consequence for school behaviours and performance?

13. Is there a parent's group associated with the school in any way? Are there any particular parents who show a special interest or involvement in this school? (Names)

14. Do you have a school library? (Get name of librarian or person responsible).

Now, I would like to ask you some questions concerning the programmes in your school, and your assessment of the outcomes of these programmes:

15. Do you have any documents or outlines which would help me to understand the structure of the courses in English or mathematics at your school?

16. (a) Is there much variation in the way basic communication skills are taught in your school?

Mathematics?

source of variation).

17. To what extent are you involved in the planning of curricula or the development of classroom materials?

18. (a) When teachers "talk shop", what issues or problems are most often discussed?

(b) Do you ever talk about the adequacy of basic skill-learning?

19. Are students given any explicit critique or evaluation of their basic communication and mathematical skills in school situations outside math or English classes?

20. (a) Do you personally feel satisfied with the level of achievement in (subject area) typically demonstrated by your students?

(b) What is your base for comparison here?

(c) Can you be very specific about the kind of gaps or shortcomings you have in mind? (examples)

(d) What would you identify as the major source of learning difficulties?

(e) What changes would you personally like to see made in the teaching of basic skills here in Alberttown?

21. How large is the role of the school in conferring "basic" skills, by comparison with the role of the home and the media? (Probe for % estimates of each).

22. There has been a lot of recent public concern over alleged "deficiencies" in the basic communication and mathematical skills of high school graduates: why do you think people have made such claims? How would you answer them?

23. Have you, yourself, had any direct feedback, either positive or negative, from students, parents or employers, on these questions?

24. Do you think that your students attach much importance to the acquisition of basic skills? How do

they show this?

25. (a) Are there any formally organized programmes of remedial work in basic skills in your school, or instances of individual students doing such work?

(b) How are students selected for such programmes?

26. (a) Are there standardized evaluation and test procedures used at this school in English? Mathematics? (Which? How often?)

(b) How do your students fare on such tests?

Finally, a couple of questions about change in the schools:

27. From your observation and experience, what are the most important changes which have taken place in the teaching of basic skills over the past ten years or so? (Probe for specifics: examples)

28. Have there been important changes in policy from the Ministry, or from the board, in regard to the teaching of "basics"?

29. Do you view these changes as new strategies for achieving the same goals, or do you see them as implying different aims and objectives on the part of the teachers?

30. (a) Have you noticed changes in the students over the past few years? (i.e. in the student population)

(b) What sort of changes?

31. How would you assess the impact of television upon the learning of "basic" oral and written communication skills by young people today?

32. How would you assess the impact of part-time work experience?

I really appreciate the help which you have given us in trying to understand these issues: there are no more formal questions, but I wonder if there are any additional comments or suggestions which you would like

to add.

We are anxious to observe, first hand, classroom work in (subject area), but we do not wish either to interrupt school routine or to see "model" classes. What we are looking for, then, is the opportunity for informal viewing of on-going classes, on the invitation of the teacher concerned. If there are lessons, projects or activities which you would like us to see, and which you think might help us to understand present instructional practices or problems, we would be very pleased to hear from you.

Again, many thanks for your help in this interview.

SCHEDULE FOR COUNSELLORS

(Face sheet data and preamble identical with Schedule T, Revised)

First, I'd like to talk with you about your role as a counsellor:

1. Do you have duties other than counselling?
(Specify)

How do you divide your time?

2. How is your counselling time divided, roughly, between work with students on personal problems, and work on curriculum choice and career orientation?

3. How do you personally feel about these two different aspects of counselling? (Which are you most concerned with? Why?)

4. What do you think that the role of the school should be in relation to the work world? (Is your school filling this role in the way that you think it ought?)

5. Do you have regular contact with parents?

5. Do you have regular contact with parents? employers? universities? and colleges? (Can you describe these contacts? Estimate frequency.)

You know that we are particularly interested in "basic" communication and mathematical skills; there are a few questions I would like to raise in this area more specifically:

6. How do you personally see the role of the school in relation to the teaching and learning of basics?

7. How would you appraise the effectiveness of your school in preparing students in these basic skill areas? What evidence do you have as a basis for this evaluation?

8. Have you had feedback on this preparedness from parents? employers? former students? people in colleges and universities?

9. Do questions relating to such basic skills often enter your discussions with students about curricula and careers? (Can you give me examples?)

10. What kind of variation do you see in the level of such skills needed by different groups of students?

Are students aware of these differences, in your opinion? How do these differences show up in the curricula of your school? Do your estimates of differences in basic skill requirements enter counselling activity? How? Can you give me an example?

11. What do you think employers are looking for, primarily, in a young person just starting work?

12. Many students have part-time jobs today. What do they tell you about their work experience?

13. Do you think that students themselves attach much real importance to proficiency in "basic" skills? (Probe for basis of observations) Is there any

difference, in this regard, between students with work experience and those who haven't had jobs?

14. Are there changes going on in the way students view their own education and goals? (What are these?)

15. Have there been important changes in the way basic skills are taught or evaluated over the past few years?

16. Do you see any changes over these past years in the emphasis put upon such skill learning by the board? the Ministry? teachers? the public?

N.B. Pick up relevant additional questions from Schedule T where the counsellor is also a teacher, particularly in basic skill area. Avoid replication where possible.

Thank respondent: reassure on confidentiality of the interview data.

We are also talking to some students, and if you know of any particular pupils whose ideas or experiences would, in your estimation, be useful to us, please put us in touch with them. We will then seek parental permission for an interview.

SCHEDULE FOR STUDENTS

Face Sheet Data: Name; Grade; School; Board; Age; Sex; Occupation of Chief Household Wage-Earner; Date of Interview; Interviewer; Parental Approval Checked; First Language of Parents.

Before we begin to talk, perhaps you have questions concerning the research project that I could answer for you. I would like to reassure you that all interview materials are strictly confidential; they are for the use of the researchers only and will in no way be relayed to your fellow students, your parents or teachers. You can best help us by giving a candid and personal response. There are no "right" or "wrong" answers to the questions, so don't be influenced by

what you think an adult or a researcher might "want" to hear. We want to hear about your ideas and your actual experience.

First, I'd like to ask you about some of your activities outside school:

1. What are your main hobbies or recreational activities outside school? (Sports?)
2. Let's try to make an estimate of the number of hours of television which you watched in the last week. (Estimate weekday, weekend, for last calendar week: start with yesterday.) Totaly Weekly hours.
3. What kind of programmes do you watch most often?
4. Do you read at all outside of school and homework? (What? When? How long?)
5. Do you ever write letters? (How many letters have you written in the past month?)
6. Do you ever write anything other than letters, anything outside of school and homework?
7. Do you ever use mathematics or arithmetic at home, or somewhere else outside school? (Where? Probe use)

Now, I'd like to talk about some of your work at school:

8. (a) Outside your classes in English, or other languages, do you turn in or produce much written work? (e.g. how many pages in the past week? month?)
(b) Were these criticized or corrected for grammar, spelling or style (NB not "grading")?
9. Do you personally own a dictionary? How often do you use it when you are writing?
10. (a) Does it mean much to you whether you write and spell according to the rules?
(b) Why do you feel that it is (not) important?

11. Are you presently taking English classes? Were these options? Why did you choose the(se) course(s)? (Why not?)

12. How often do you turn in written work in English classes? (Estimates for past week and month)

13. Does the teacher give you written comments on your grammar and spelling, or does he discuss your work with you? (Oral correction?)

14. What do you think that your English classes are concentrating on most? (What kinds of things occupy most of your time in English classes?)

15. Does the teacher think that your reading and writing skills are adequate? How do you know this? What do you think of your own reading and writing abilities?

16. (a) Do you have to make any use of mathematics (arithmetic or calculation) in your school work outside math classes? (Where? How often?)

(b) Do you have the skills required in these situations? (probe for both self-evaluation and teacher feedback)

17. Are you presently taking math courses? Are these options? Why did you choose the(se)?

18. How important do you think that mathematical skill will be for you: - in your future work? - in any education beyond high school? - in your personal life?

19. (a) From year to year, and from class to class, have you noticed much difference in the way English is taught, either in content, class organization or emphasis on different objectives? (Probe for specifics)

(b) What about mathematics? Are there any differences which you have observed in that area?

Finally, let's talk a little bit about your plans for the future.

20. What is your best (most realistic) guess as to what you will be doing in the first years after you leave high school? (Probe specifics)

21. Have you made, or will you make any choice of courses aimed at your plans for work (or higher education)?

22. With whom have you discussed these choices (Whom; how often; what advice?) Which of these persons do you think really influenced you most?

23. Do you think that you will have to make much use of writing and reading skills at work (university or college)? Of mathematical skills?

You know that we are interested in the teaching and learning of reading, writing and mathematical skills, and in the way students feel about these skills in the school, in their own lives, and in their future work. Are there any other comments you would like to make - anything you personally want to say about these issues? Thank you very much for your help.

COHORT INTERVIEW SCHEDULE

INTRODUCTION

(introduce yourself by name to interviewee)

I would like, first of all, to thank you for agreeing to be interviewed. We very much appreciate the time you took to answer our questionnaire and if you have any questions about our project, I would be more than happy to answer them now. (Answer.) If not, please feel free to ask any questions after our formal interview is over.

I would like to mention a couple of things to

you:, one is that these interviews are held in strictest confidence and will be shown to no one outside the research team. Secondly, there are no right or wrong answers here, your own personal thought about the questions I ask is what is most valuable.

The interview should take about () minutes, please ask me to clarify any questions that are unclear to you.

Firstly, I'd like to ask you a few questions about your experiences in school:

1. I see from your questionnaire that you took () credits in English: can you tell me about some of the courses which you took? (Probe for main emphases such as Literature/Writing skills/Oral skill.)

2. How did you come to take these courses? What did you expect, or hope, to get out of your English courses? (Did you?)

3. In general, how well did you do in your English courses?

4. Did you spend a lot of time and effort on English, or was this a subject that didn't get much of your attention? (eg. Did you read all the assigned materials?)

5. What were the things you did most poorly in English, or had the most difficulty with? (Why? Did the school help you with these problems in any way? How?)

6. What were the things which you did best in English courses?

7. Looking back, do you feel that more time and emphasis were given to studies of literature or to the development of your writing skills(eg. grammar, vocabulary, spelling, organization)? (Are you happy about this emphasis of your course work?)

8. Outside English classes, did your teachers seem to care much about your grammar, spelling, and writing skills (What did they do in showing this attitude?)

9. Can you tell me about the content of some of the math courses which you took in school? (Check questionnaire for credits).

10. How did you come to take these math courses? (Did you feel that you were "required" to take them? What goals did you have in mind in selecting them?)

11. Overall, were you good at math in school, or did you have problems, (What sort of problems? How did the school help?)

12. Do you feel, looking back, that you could have had better courses or better instruction in mathematics, either in elementary or secondary school? (When? How?)

Perhaps we could talk now for a few minutes about your life at home and outside school:

13. Could you tell me a little bit about the educational background and occupation of your parents and brothers and sisters?

14. How often did your parents discuss with you (a) your school work? (b) your educational plans? (Every few months? weeks? days? not at all?)

15. Did you do much writing or reading which was not part of your school work? (What? When? How much?)

16. Did you have any occasion to use mathematics regularly outside school? (When? How much?)

17. Did you have a part-time job? () hrs./wk. Did you have to read/ write/do math in these situations?

Now I have a few questions concerning your career since leaving school:

18. How did you come to enter the (work world/community college/university)? Can you describe for me the steps by which you got here?

19. Which decisions or events, in school or after leaving school were most important in bringing you here, to this school/job?

20. Which people have influenced you most in your decisions about school and work choices?

21. Are you now doing what you really want to do? What other things might you have done after leaving high school? (What steps did you take to explore this (these) alternative(s)?

For our research, the most important information concerns your present activities; let's talk about your current position:

22. Can you tell me something about your daily (and weekly) round of activities at (work/school)? (NB Identify major tasks)

23. What kind of skills do you think a person has to have in order to do well in a job/course like yours?

24. Do you do any (much) reading in your job (course)? What? How much? (eg. What proportion of a typical work day is spent reading?) Work (type, amount) Student (courses, amount)

25. How does the reading relate to the other tasks which are important for your job (course work)? (ie. What use do you make of this reading?)

26. Can you tell me of any situations where you have to read very carefully (or intensively)?

27. Are there situations in which you do not have to read so carefully?

28. On the average, do you read everything you are asked to read or are supposed to read? (Do you skip

over materials without reading them completely? When? What kinds of things?)

29. Are there ways in which you can get around having to read, and still get your work done? How?

30. Do you do any (much) writing in your job (course)? What? How much? (eg. what proportion of a typical work day is spent writing? work(specify type, amount) student(specify, courses, amount.)

31. How does the writing relate to the other tasks which are important for your job (course work)? (ie. what use do you make of this writing?)

32. Can you tell me of any situations where you have to be very careful about your writing?

33. Are there situations in which you do not have to write as carefully?

34. On the average, do you write everything you are asked to write or are supposed to write?

35. Are there ways in which you can get around having to write and still get your work done? How?

36. Do you feel your elementary and secondary English courses prepared you adequately for the reading and writing demands of your present position? (probe for feedback/external criteria of reference)

37. Are there any skills you learned in your English classes in high school that you find particularly useful to you in your present position?

38. Are you involved in any kind of remedial work concerning your reading and writing skills at the present time? (probe for selection for, nature of, duration of)

39. Do you have to give or relate to instructions orally in your present situation? Any difficulties doing this?

40. Do you have any (much) math in your job (course)? What? How much? (eg. what proportion of a typical work day is spent doing math?) work(specify type, amount) student(specify courses, amount)

41. How does the math relate to the other tasks which are important for your job (course work)? (ie. what use do you make of this math?)

42. Can you tell me of situations where you have to be very careful about the way you do your math?

43. Are there situations in which you do not have to be as careful about your math work?

44. On the average, do you do all the math asked of you?

45. Are there ways in which you can get around having to do math and still get your work done? How?

46. Do you feel you are able to do math asked of you in these situations?

47. Do you feel your elementary and secondary math courses prepared you adequately for the math demands of your present situation? (probe for feedback/external criteria of reference)

48. Are you involved with any kind of remedial work concerning your math skills at the present time? (probe for selection for, nature of, duration of)

Let's think ahead for a while now: I have a couple of questions concerning your future:

49. Where do you think you would most likely go from your present job (course)? (Short term, realistic expectations)

50. What position would this most likely lead to in the future? (Long term, career line)

51. What sort of mathematical or communication skills would be required for these positions which you might hold in the future?

52. Will you likely take any further courses to improve your skills in either math or English? (will you study on your own?) What? Why?

Finally, I would like to talk to you for a minute about some of your feelings toward work roles in our society:

53. Do you often find yourself thinking or worrying about your (work/ course) after you have finished for the day or on the weekends?

54. When you have a task to perform at (school/work) do you spend a lot more time on it than is really required? (ie. check it carefully for mistakes, do it over until you are personally satisfied with it?)

54. What kind of salary do you expect to be earning in 5 years?

56. Could you tell me about how many times per month you are late for (work/class)?

57. On the average how many days/month would you be absent from (work/ class)?

58. We know that all the time that people spend at work (school) is not spent in actual work. Could you estimate how much time you actually spend working/wk.?

59. Lastly I would like to ask your permission to have access to your O.S.R. This will allow us to have a look at your school records and gain accurate perceptions of your school work. this form (hand to interviewee) will explain it in more detail).

Thanks.

ONTARIO ECONOMIC COUNCIL — COMMUNITY RESEARCH PROJECT

Like most young people, you probably feel that the first years following high school are very important to you and your career. We need to know more about the kind of experiences which young workers and post-secondary students encounter, and about their success or problems in meeting the demands of their new situation. Would you take a few minutes to tell us about your experiences? We think that you will find the questions interesting. We can assure you that your assistance will be valued and will be of real help in planning for both education and the work world. Thank you.

The information you give us will be used only by the researchers and will never be seen by your teachers or your employers.

1. We will be interviewing a few of the people who answer this questionnaire. If you would allow us to contact you concerning the possibility of such an interview, should you be selected, please check the following box. ☐

INSTRUCTIONS: In each of the following questions please check [✓] the answer which best fits your present situation, either in school or at work. Read carefully before answering.

2. Name _____
Address _____

Phone no. _____ Age _____

Sex _____ Marital Status _____
_____ 1. Male _____ 1. Single
_____ 2. Female _____ 2. Married

3. At the present time I am . . .

	Full Time	Part Time
1. working	☐	☐
2. attending university	☐	☐
3. attending community college	☐	☐
4. other, please specify _____		

4. How demanding do you find your present situation?
_____ 1. easy to handle
_____ 2. tough at times
_____ 3. very demanding
_____ 4. almost too much for me

5. How satisfied do you feel with your situation?
_____ 1. it is exactly what I want to do
_____ 2. it is fairly satisfactory
_____ 3. it is mostly unsatisfactory
_____ 4. it is so bad I'd like to quit

6. How much do you use the following skills in your present situation?

	All the time	Fairly Often	Sometimes	Rarely	Never
reading	☐	☐	☐	☐	☐
writing	☐	☐	☐	☐	☐
math or arithmetic	☐	☐	☐	☐	☐
listening (to instructions, information)	☐	☐	☐	☐	☐
talking (giving instructions, information)	☐	☐	☐	☐	☐

7. Your present situation may provide you with an opportunity to apply some of the skills which you acquired before leaving secondary school.

Whatever your skills in the areas listed below, think about how adequate they are to the demands of your present situation. Please indicate where your feeling about your skill preparation falls by checking the appropriate space between the opposite phrases.

For example: A mouse is: small ☒ _____ large
An elephant is: small _____ ☒ large

A) In terms of WRITING skills, I am . . .

well prepared for what I have to do	_____	_____	_____	_____	_____	not very well prepared for what I have to do
adequate for present tasks	_____	_____	_____	_____	_____	not adequate for present tasks
well trained for my present situation	_____	_____	_____	_____	_____	poorly trained for my present situation

PLEASE TURN OVER

B) In terms of MATHEMATICAL skills, I am ...

well prepared for
what I have to do

not very well prepared
for what I have to do

adequate for present tasks

not adequate for present tasks

well trained for
my present situation

poorly trained for my
present situation

C) In terms of READING skills, I am ...

well prepared for
what I have to do

not very well prepared
for what I have to do

adequate for present tasks

not adequate for present tasks

well trained for
my present situation

poorly trained for my
present situation

8. We appreciate the information given above, concerning the challenges of your present work or school situation, but we are also interested in your feelings about work in general. Please take a moment to respond candidly to the four statements below. Check the response which best expresses your own feelings about each of these statements:

a) I'm always pushing myself to work harder or longer.

agree
strongly

agree
somewhat

disagree
somewhat

disagree
strongly

b) I can only expect from society what I return in the way of hard work.

agree
strongly

agree
somewhat

disagree
somewhat

disagree
strongly

c) I would feel guilty if I didn't work really hard.

agree
strongly

agree
somewhat

disagree
somewhat

disagree
strongly

d) Everyone in this society has a moral obligation to work hard.

agree
strongly

agree
somewhat

disagree
somewhat

disagree
strongly

9. Name of Elementary school(s) attended:

Most Recent _____ Grades _____ to _____

Earlier _____ Grades _____ to _____

Earlier _____ Grades _____ to _____

10. Name of Secondary school(s) attended:

Most Recent _____ No. of Years _____

Earlier _____ No. of Years _____

Earlier _____ No. of Years _____

11. When you graduated from high school how many credits in total did you have? _____

How many English credits did you have? _____

How many Math credits did you have? _____

12. If you are presently working full time please fill out Section A below.

If you are now attending a post-secondary institution on a full time basis please answer the questions in Section B below.

A: Present place of employment _____

Present position (be specific) _____

Length of time in present position _____ Months

Is your present job the only one you have had since leaving school?

YES ☐

NO ☐

If NO: How many other full time positions have
you held since leaving school?

1

2

3

4

5

or more

☐

☐

☐

☐

☐

☐

B: Institution presently attending _____

Program _____ Length of Program _____ Years

Thank you for answering all of our questions.
Please put this in the enclosed envelope and drop it in the mail.
We pay the postage.

Appendix B

Methodology

This brief appendix provides some additional information on the research strategies, decisions, and procedures. Available here for the curious or critical reader, such information has been pruned from the text of the report itself, where it would have appeared in repetition, interrupting in many cases the flow of argument or discussion. Our general logic of inquiry and the rationale for selection of a community study framework are presented in the Introduction (Chapter I), where a description of eight "probes" gave a condensed account of data collection procedures. This appendix builds upon that general information by organizing comments in terms of the four research phases projected by our original proposal (1975): (1) Community Base Data, (2) Labour-Market Study, (3) Education Study, and (4) Cohort sample: case studies.

1. Community Base Data

This initial phase involved a collection of existing data on our community, with the aim of identifying any social or economic characteristics which might be unusual by comparison either with other urban regions of similar size or with the characteristics of the province as a whole. Published census data were employed, here, supplemented by materials extracted from the Statistics Canada Canadian Census Data Management System (CCDMS) tapes. The following areas were probed: population distribution by age, language, ethnicity, occupation and education; community characteristics by type of industry, agriculture, family and household data and migration patterns.

Beyond the census data, a small background library of materials was collected, including maps, brochures, directories, histories and published school programmes. Here, we tapped the municipal government, the Chamber of Commerce, the Research and Development Branch of Manpower, the local Unemployment Insurance Commission office, college and university admissions offices, the boards of education and the local newspaper.

At the same time a computer bibliographic search was effected through the facilities of the Canadian Consortium for Social Research(1), locating published materials relevant to our dual theoretical foci in education and work. These materials were subsequently checked and copies of pertinent publications were added to our collection of materials for the use of all the field researchers.

As the emergent materials confirmed the appropriateness of our initial selection of the community, this first phase moved over into the task of establishing contacts and ensuring formal approval for our access to the schools and to restricted data in education and employment. Local media were used to acquaint the public with the research, in very broad and deliberately vague terms. Following this, formal application was made to the various boards, through appropriate officials and liaison committees. This work was crucial to our community study enterprise, since the restriction of access to any one sector of the school system would undermine the whole endeavor, as would any lack of confidence and cooperation in the business community. It is perhaps difficult to speak of "rapport" in relation to a community as such, but we believe that our inquiry was well received in all areas and that confidence and openness grew throughout the twelve months of field work.

(1) This facility is located at the Institute for Behavioural Research, York University, Toronto.

2. Labour Market Analysis

The second research phase involved the construction of a detailed profile of the occupational opportunities for high school graduates and leavers, and a set of interviews with the employers.

An inventory of nearly two thousand employers was carried out with the aid of Scott's Industrial Index, an industrial and commercial directory prepared by the local Chamber of Commerce, Canada Manpower listings, lists from the Unemployment Insurance Commission, the city directory, and the telephone book. These employers were then classified by product or service, after exploration of various existing classifications including the Blishen scale, the Statistics Canada classification, and the Standard Industrial Classification Index.

From this source, representative samples of employment in manufacturing, construction, transportation and communication, retail trade, financial and education services, health and welfare services, and public administration were subsequently drawn. The largest employers were interviewed first, on the assumption that they would be hiring more of the recent high school graduates than would the smaller firms. Over seventy-five major employers in the areas of manufacturing, finance, retail trade, education and health services, and public administration were interviewed. Using a standardized interview schedule (see Appendix A), key personnel from each business were interviewed. These included personnel, office, and plant managers. A wide range of occupations was represented. This work was supplemented by twenty-five shorter interviews, conducted by telephone.

Labourers, office clerks, bookkeepers, typists, and lab technicians are examples of the jobs occupied by recent high school leavers in these areas. The sample represents over 13,000 jobs in the city. Included in the sample are twenty-six of the largest industrial companies, which account for more than sixty-eight per cent of the industrial work force.

The basic sampling strategy was to interview within each industrial or commercial sector until

"saturation" occurred, and little new information was being generated by successive interviews.

3. Education Study

This phase, simultaneous with phase two, involved a second team of two field researchers, and extended over one full school year. Since we needed information on the school as a complex organization and social system, we decided to sample schools as such, rather than drawing in survey fashion from the various populations of teachers, students, and administrators. This procedure had the added advantage of affording a substantial stay in each school, where observation and informal discussion could supplement the formal interviewing. Rapport grew throughout each of our school visits, which averaged two to three weeks (longer in some cases), as staff and students came to know and trust the interviewers. In many cases we were invited to join in recreational activities, meals, assemblies, or "breaks" with both teachers and pupils, although relationships with administrators generally remained on a somewhat more formal level.

We carefully "selected" schools at the elementary level, with the help of the board officials. We wished a school sample which would be representative, rather than random, in terms of variability in (1) socio-economic and ethnic neighbourhood characteristics, (2) programme and facility characteristics (e.g. open concept vs closed classroom, or "innovative" vs conservative programme) and (3) grade levels (i.e. K-6, K-8 or 7-8). We selected in this way from both separate and public boards - ten schools in all. We decided to work in all the secondary schools in the community (five in number) in order to tap the evident diversity of functions and structures.

A timetable was worked out with boards and principals to find convenient weeks for work in each school. Each field worker visited elementary schools alone, but both were simultaneously at work in each of the secondary schools. The identification of study objectives to school personnel was again rather

deliberately vague, to minimize any response biases elicited by preconceptions of our concerns.

Within each selected school, we again opted for a representative rather than a random sampling of the various categories of participants. Principals, counsellors, mathematics and English heads, coordinators of technical and commercial areas, librarians, and remedial specialists were routinely interviewed in each secondary school. Beyond this core, we selected our subjects for variation by duration of teaching experience, by grade level, by subject, or by identification with a particular problem area or interest. Informal conversation in the schools quickly identified teachers who had special kinds of information or experience related to our interests. We simply expanded our interview selection in this fashion, until anywhere from one quarter to more than one-half of the staff had been interviewed.

Students were similarly selected, either by the field workers directly from central student card files, or with the aid of counselling departments. We made a consistent effort to tap students from diverse home backgrounds, programme areas, levels (i.e. "four year" or "five year"), career lines (e.g. transition at various points from separate schools), or classes (e.g. remedial). As well, we interviewed students who, on the evidence of their teachers, exhibited unusual levels of proficiency in basic skills: we wanted to sample both ends of the spectrum of capabilities. In the elementary schools, both teacher and pupil respondents were located according to similar criteria, with the principal as the only uniform selection.

Our interview schedules were developed after we had mapped the dimensions of our concerns by means of preliminary interviews using a "guide", or set of discussion topics. After several weeks of trial use, these schedules were critically revised, largely by way of editing unproductive questions or clarifying terms. Separate schedules were developed for pupils, teachers and principals, with an addendum to the teacher schedule for use with counsellors. Particular questions for other key personnel such as librarians or remedial teachers were prepared and added freely on an

individual basis. (Sample schedules may be seen in Appendix A.) Notes were, as far as possible, taken verbatim, to permit the use of direct quotation and to minimize recording biases. The education field workers were trained, full-time researchers, each with more than a decade of interviewing experience. They met on a daily basis, and sometimes more frequently while this work was in progress, to exchange information, compare experiences and explore interpretations of the emerging data. During this whole period, weekly meetings of the four member research team provided opportunities to discuss both tactical and conceptual problem areas, while exchanging reports on progress.

Data collection, as indicated earlier, was not restricted to formal interviewing. We collected, first, all useful and relevant documentation from each school, including student handbooks, timetables for staff, standardized test results, examination and promotion summaries, curricula, position papers from various departments, samples of exercises and student work, and in-school surveys of matters such as course enrolment and load or part-time work experience. In general, much more of such material was both available and relevant in the secondary schools. Second, we supplemented formal interviewing with a substantial time spent in informal discussion. This took place in halls, classes, cafeterias or staff lounges, where - singly or in groups - teachers welcomed us for on-going discussions of pupils, school life, teacher problems or social issues. Given the lower response bias of such material, we treated these data as having a relatively high import and validity. Such discussion blended gradually into a "participant observation" dimension, in which we attempted to record and interpret all sorts of observational data ranging from the physical decor of the classroom to the casual conversation of students overheard in hallways. Such material was generally used as a spur to sharper formal inquiry, or as a check upon our interview data, rather than as a strong independent data source. Regular formal classroom observation was undertaken as well, generally at the instigation of the field worker, and on short notice, to avoid any strong response bias. Most teachers

invited us to drop in on classes "at any time", and we had many more such offers than we were able to oblige. An important part of this data collection process was the organization of all materials by school, enabling us to explore the on-going fit amongst the elements of information, and to develop an analysis at the level of school structures and process.

Prior to, and concomitant with our field work in the schools, we undertook to interview a number of trustees (for whom a separate schedule was developed) as well as a few parents, and some key officials at the level of the local Boards and regional Ministry offices. The latter generally required a specific interview guide based upon the special competencies, experience or responsibilities of the interviewee. Various reports and items of documentation were also obtained at the board level.

4. Cohort Sample: Case Studies

Following the second and third phases, the research team met to integrate some early inferences from the education and work sectors. On the basis of identified interests, a draft interview schedule was developed for use with young people who had recently left the school system for employment or post-secondary studies. This schedule was pretested for us by a group of five senior sociology students (under supervision by one of the principal researchers) who interviewed some thirty college students from our selected community. The students not only reported on their findings from these data, but prepared a methodological critique of the schedule and the interviewing process as well.

In identifying the population for our sample of case studies, designed to unify our observations of employment and education through concrete career histories, we had to choose between contact through employers or through the school system. The latter option appeared most economical. We decided to define this population as including all students leaving the secondary schools of the community during or after the academic year 1974-1975. While the local schools could

not provide lists of names for us, they undertook to forward our request to the students by preparing their own mailings from confidential records. To our request, each school added a letter of support over the signature of the principal. Pretesting of this tactic with the community college (from lists provided by the college itself) had indicated the difficulty of achieving an adequate response to requests for an interview by this method. We had therefore experimented with the inclusion of a brief questionnaire rather than a letter of request. One question simply asked whether the respondent would be willing to give an interview, if contacted. This was in part a motivational device, in part a method of collecting a minimum of data from a large body of respondents whom we could not contact, or who might be willing to return our questionnaire but unwilling to grant an interview.

Four scales were developed for inclusion with other, discrete items on the questionnaire. The scales were to measure the respondent's assessment of the situational adequacy of his skills in reading, mathematics and writing, and his valuation of hard work as a personal commitment. The three adequacy scales were developed in a modified semantic differential format, while the work attitude items formed a Likert-type scale. A much larger number of items was included in each scale in the pretest versions from which the final scales were derived by standard factor analysis and item reliability analysis procedures. For our cohort sample, which eventually totalled 580, the alpha reliability coefficients (Cronbach, 1951) were as follows:

Writing Adequacy	$\alpha = .86$
Mathematics Adequacy	$\alpha = .87$
Reading Adequacy	$\alpha = .90$
Work Attitudes	$\alpha = .71$

As expected, the semantic differentials evidenced higher reliability. Within each scale, all items loaded on a single factor.

Our pretest procedures afforded unusual checks beyond face validity, since the college students completing the scales were subsequently interviewed to obtain parallel information. This process was repeated in drawing the case study interview sample from our survey population. The opportunity to compare the survey data with our other observations in the same community gave further checks on validity. We believe that these very modest scales, included in what was basically a "motivational" piece designed to facilitate interviews rather than elicit extensive survey data, nevertheless meet the usual criteria of validity and reliability. Some other single items appear to provide, as well, reasonable unidimensional, metric data (e.g. items eleven and possibly six).

These data were analyzed by means of standard SPSS (Nie, 1975) programmes for cross-tabulation, correlation, regression, factor analysis, analysis of variance, and multiple classification analysis. The outcomes of this modest ancillary survey are incorporated into the report where they are substantively relevant. In general, we approached this as a very second-rate source of information by comparison with our much richer and more exhaustive qualitative materials. A profile of this sample is given in Table XIV.

A second mailing of the questionnaire was carried out, again by the schools, for non-returnees. Both mailings included prepaid return envelopes. Our original lists included some 1400 names. Of these, by our best estimates, some three hundred were accounted for by returns (address incorrect) or by movement to other schools and communities. Our "population" thus shrank to approximately 1100 school leavers remaining in the region and receiving the questionnaire. Final returns totalled 579 or 52.72%, based on the most conservative estimate of the sorts of losses described above. The return bias favoured higher literacy groups.

Returns were coded and analyzed every two days, with a programme tabulating proportions by employment, post-secondary, school of origin, sex and availability for interview. A representative sample of eighty-eight

subjects was selected for interviews, (Approx. 1 hour duration) using the revision of the schedule pretested earlier. This interviewing concluded our field work.

While we were at work in this community, four other studies related to our interests were also executed. Two master's theses in the sociology of education explored the mobility of the ethnic minority through the school system, and the differential role play of elementary and high school teachers. An O.I.S.E. study investigated problems in curricular development at the board level. We had access to all these materials (which are not cited in order to preserve the anonymity of the community). Their findings showed important and reassuring congruity with our own work. A fourth study into employers' attitudes toward the educational preparation of new workers also provided us with parallel findings.

Additional information on research procedures is available, on request, from the authors of this report.

Table XIV

DEMOGRAPHIC CHARACTERISTICS OF THE 1975 SAMPLE COHORT
OF GRADUATES AND SCHOOL-LEAVERS (N = 579)

		N	%
Age	15-17	44	7.6
	18	118	20.4
	19	230	39.7
	20	124	21.4
	21	25	4.3
	22-25	12	2.1
	No info.	26	4.5
	Total	579	100.0
Sex	Male	249	43.0
	Female	327	56.5
	No info.	3	.5
	Total	579	100.0
Marital Status	Single	553	95.5
	Married	16	2.8
	Divorced	3	.5
	No info.	7	1.2
	Total	579	100.0
Present Position	Working full-time	231	39.9
	University full-time	163	28.2
	CAAT full time	93	16.1
	Other	58	10.0
	Working part-time	24	4.1
	University part-time	5	.9
	CAAT part time	3	.5
	No info.	2	.3
	Total	579	100.0

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